CAB ABSTRACTS

ISSN 0015–7538

Forestry Abstracts

1995 Volume 56 Annual Indexes

Includes List of Source Journals

INTERNATIONAL
MYCOLOGICAL INSTITUTE
[illegible]

CAB INTERNATIONAL
00201114

CENTRE FOR AGRICULTURE AND BIOSCIENCES INTERNATIONAL
CAB INTERNATIONAL

CAB INTERNATIONAL
Wallingford, Oxon OX10 8DE, UK
Telephone: Wallingford (0491) 832111
Telex: 847964 (COMAGG G) Fax: (0491) 833508
Telecom Gold/International Dialcom: 84: CAU001

Forestry Abstracts

A monthly journal compiled from the CAB ABSTRACTS database.
Produced by the DIVISION OF NATURAL RESOURCES, FORESTRY AND ECONOMICS

Editor
C.A.D. Elbourn MSc

Editorial Advisory Board
J. Burley (Oxford, UK)
A.R. de Freitas (São Paulo, Brazil)
L. Riley (Vienna, Austria)
H.F. Kaiser (Washington, DC, USA)
H.B. Kriebel (Wooster, USA)
B.O. Lundgren (Stockholm, Sweden)
P. Sanchez (Nairobi, Kenya)
P.O. Nilsson (Garpenberg, Sweden)
A. Roeder (Trippstadt, Germany)
J.L. Whitmore (Washington, DC, USA)

Head of Department of Forestry
K.M. Becker BS, PhD

Head of Department of Soils
J.L. Nowland, BA, MSc

Scientific Information Officers

Forestry
Bridget Biggs BSc
C.A.D. Elbourn MSc
T.J. Green BSc
Anne Handley BSc, PhD
R.E.H. Haynes MA, DPhil
Gillian Petrokofsky BSc
H.M. Porter BSc

Economics
Wendy Booth BA, DipDevStudies
Caroline Espinasse BA (MLES)
Richard Degg BA, DipSocSc
Sharon Gray BSc (AgricEcon)
Jennifer J. Kay BSc (AgricEcon)
Pallavi Modi BSc (Agric Econ), MSc
Janice Osborn BSc (AgricEcon)

Soils
D.M. Carroll BSc
L. Connor BSc, DipInfSc, MIInfSc
D.J. Eldridge BSc
J.N. Fairbairn BSc, PhD
P.A. Nelson BSc, MSc, PhD
W.J. Reid BSc
A.E. Shaw BSc, MSc
S. Stokes BSc, MSc
G.P.R. Yeates BSc, MSc, DPhil

For details of the whole range of CAB INTERNATIONAL publications and services see back cover.

Orders and enquiries concerning current subscriptions and back numbers of this journal should be sent to the Marketing and Distribution Services at the above address.

Disclaimer

The information contained herein, including any expression of opinion and any projection or forecast, has been obtained from or is based upon sources believed by us to be reliable but is not guaranteed as to accuracy or completeness. The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance thereon does so entirely at his/her own risk.

CAB INTERNATIONAL does not accept responsibility for any trade advertisement included in this publication.

Forestry Abstracts is published monthly for $664 per year by CAB INTERNATIONAL, Wallingford, Oxon OX10 8DE, UK. Second class postage paid at Jamaica, NY and additional mailing offices. POSTMASTER: SEND ADDRESS CHANGES TO: CAB INTERNATIONAL, c/o IMD INC., 182-08 149TH AVE., SPRINGFIELD GARDENS, NY 11413.

0FIFC-95

Forestry Abstacts

Volume 56

CAB INTERNATIONAL

Prepared by

CAB INTERNATIONAL
DEPARTMENT OF NATURAL RESOURCES AND FORESTRY

1995

ISSN 0015-7538

© CAB INTERNATIONAL, 1996

All rights reserved. No part of this publication may be reproduced in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without the prior permission of the copyright owner.

published by

CAB INTERNATIONAL
Wallingford
Oxon OX10 8DE UK

The information contained herein, including any expression of opinion and any projection or forecast, has been obtained from or is based upon sources believed by us to be reliable but is not guaranteed as to accuracy or completeness. The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance thereon does so entirely at his/her own risk.

printed by

Unwin Brothers Ltd, The Gresham Press, Old Woking, Surrey, UK
A Member of the Martins Printing Group

FORESTRY ABSTRACTS STAFF PAGE

Editors
C.A.D. Elbourn MSc
Bridget Biggs BSc

STAFF

Department of Natural Resources and Forestry

Head of Department
J. L. Nowland BA, MSc

Scientific Information Officers

Forestry
K.M. Becker BSc, PhD
Bridget Biggs BSc
C.A.D. Elbourn MSc
T.J. Green BSc
Anne Handley BSc, PhD
R.E.H. Haynes MA, DPhil
Gillian Petrokofsky BSc
H.M. Porter BSc

Soils
D.M. Carroll BSc
L. Connor BSc, DipInfSc, MIInfSc
D.J. Eldridge BSc
W.J. Reid BSc
S. Stokes BSc, MSc
K. L. Whitaker BSc
G.P.R. Yeates BSc, MSc, DPhil

Other Contributors
W. Linnard MA, DipFor, PhD
Paul Richards BSc, PhD

Support Staff
Hazel Adams
Elaine Coverdale
Philip Winfield

Forestry Abstracts

Contents
Volume 56

General publications and general techniques	1	89	193	297	413	539	663	795	909	1025	1151	1265
General aspects of forestry	5	96	197	306	419	551	667	801	918	1034	1157	1272
General. Biographies	5	–	–	306	–	551	–	801	918	1034	–	–
Forestry – national, regional or international. Forest history	5	96	197	306	419	551	667	801	918	1034	1157	1272
Legislation	7	97	198	307	421	552	669	803	920	1037	1160	1275
Taxation. Sources of finance, Insurance	7	–	199	307	–	552	669	803	920	1037	1160	1275
Education, training and research. Information services	7	97	199	307	421	552	669	803	920	1037	1160	1275
Organizations, publicity, extension, opinion	7	97	199	308	421	552	670	804	920	1037	1161	1276
Labour considerations. Safety. Work study	7	97	199	–	421	552	670	805	920	1037	1161	1276
Forests as a source of energy	7	–	200	308	421	553	670	805	920	1037	1161	–
Silviculture	7	97	200	308	422	553	670	805	921	1037	1162	1276
Choice of species. Trials of species, provenances etc	7	97	200	308	422	553	670	805	921	1037	1162	1277
Seed (for propagation)	9	99	202	310	423	555	672	808	922	1039	1163	1278
Vegetative propagation. Tissue culture	10	101	202	312	425	556	673	809	923	1040	1164	1280
Use of fertilizers	15	103	204	316	427	559	678	812	924	1042	1166	1282
Nursery practice	17	107	206	318	430	561	679	812	925	1046	1166	1284
Establishment and tending of stands	18	108	208	318	431	562	680	815	926	1046	1167	1285
Silviculture by species and species group	21	112	215	322	436	569	685	821	931	1050	1176	1293
Machinery	22	113	216	323	437	569	685	822	931	1050	1176	1294
Growing and collection of forest products other than wood	23	113	216	323	437	570	685	822	932	1050	1177	1295
Forest mensuration and management	25	115	218	324	437	571	686	824	933	1052	1179	1296
Systems and units of measurement	–	–	–	–	–	571	–	–	–	–	–	–
Measurements of trees, stands and round timber	25	115	218	324	437	571	686	824	933	1052	1179	1297
Growth, increment. Biomass production	25	116	219	325	438	572	687	826	934	1053	1180	1299
Management plans and planning	27	117	221	329	440	576	689	829	937	1054	1182	1301
Inventory, including sampling methods	27	118	221	330	441	577	690	830	937	1056	1184	1303
Surveying and mapping. Remote sensing	28	119	222	332	442	579	690	832	938	1056	1184	1304
Business economics of forestry	29	122	224	335	444	580	692	834	940	1058	1185	1306
Administration of forest enterprises	30	123	225	336	445	581	693	835	941	1059	1186	1308
Physical environment	30	123	225	336	445	581	693	835	942	1059	1186	1308
Climate and atmospheric influences	30	123	225	336	445	581	693	835	942	1059	1186	1308
Land form. Slope. Aspect. Altitude	32	127	228	339	451	585	695	839	945	1061	1188	1311

Soil	32	127	229	339	451	585	695	839	945	1062	1188	1311
Plant water relations	35	130	232	343	455	589	702	843	948	1072	1193	1316
Plant nutrient relations	36	133	235	345	460	592	704	844	949	1074	1196	1317
Pollution. Damage by man	38	137	237	348	464	596	707	847	952	1078	1198	1319
Effect of various growth factors on wood properties	41	140	241	353	471	601	713	852	956	1083	1202	1322
Influence of forest on the physical environment	41	141	241	354	471	603	714	853	957	1083	1203	1322
Fire	43	142	242	356	473	605	716	854	958	1086	1205	1324
Predisposing factors and causes. Fire–danger rating	43	142	242	356	473	605	–	854	959	1087	1205	1324
Prevention and control	44	142	242	356	473	605	716	854	959	1087	1206	1324
Effects of fire	44	142	243	356	473	606	716	854	959	1087	1206	1325
Plant biology	45	143	243	358	474	606	717	855	960	1088	1207	1325
Silvicultural characters. Habit. Phenology	45	143	243	358	475	606	717	856	960	1088	1207	1325
Anatomy, morphology, development, embryology	46	144	245	359	476	607	718	857	961	1089	1207	1326
Chemistry	48	147	250	364	479	613	720	863	964	1093	1210	1328
Physiology, biochemistry	51	149	250	367	482	615	721	866	965	1095	1211	1332
Reproductive behaviour. Dispersal	55	156	255	373	492	623	724	872	970	1099	1215	1335
Taxonomy, nomenclature. Herbaria	58	158	257	375	495	624	725	874	971	1101	1217	1339
Floras, checklists	59	159	258	376	496	625	726	874	972	1101	1218	1340
Plant ecology	59	159	258	377	496	625	726	874	973	1101	1219	1340
Genetics and breeding. Variation. Evolution	64	170	264	387	511	635	731	883	984	1108	1224	1348
Mycology and Pathology	71	173	271	390	516	640	745	887	991	1118	1230	1351
Fungal ecology	–	173	271	390	516	640	745	887	991	1118	1230	1351
Insurance	7	–	199	307	421	552	669	803	920	1037	1160	1275
Mycorrhizas and other (fungal, bacterial etc) symbioses	71	173	271	390	516	640	746	887	991	1119	1230	1352
Fungal diseases	72	174	274	393	518	642	753	889	993	1123	1232	1354
Bacteria	73	176	279	394	519	645	759	891	995	1126	1237	1355
Viruses, mycoplasmas etc	73	176	279	394	–	645	760	–	995	1127	–	1356
Protection and control	73	176	279	394	519	645	760	891	995	1127	1237	1356
Miscellaneous, including mistletoe	73	177	279	–	520	645	760	892	995	1127	1238	–
Insects and other invertebrates	74	177	280	394	520	646	761	892	996	1128	1238	1356
Invertebrate ecology	74	177	280	394	520	646	761	892	996	1128	1238	1356
Insect pests	74	178	280	394	520	646	761	892	996	1128	1239	1357
Mites as pests	80	–	288	–	–	–	775	–	–	1131	1244	1360
Nematode pests	80	180	288	396	–	648	775	–	1006	1131	1244	–
Other invertebrate pests	80	–	–	–	–	648	–	–	–	–	–	–
Protection and control	80	181	288	396	522	648	776	895	1006	1131	1245	1360
Range	82	181	289	397	523	–	779	895	1008	1132	1247	1360
Game and wildlife	82	182	290	397	523	649	779	895	1008	1132	1247	1361

Fish	–	184	291	401	–	653	–	–	1012	–	1252	1363
Protection forests. Watershed/catchment management. Soil conservation	83	184	291	401	527	653	782	899	1012	1135	1252	1363
Watershed/catchment management. Water conservation. Hydrology	83	184	291	401	528	653	782	899	1012	1135	1252	1363
Soil conservation and erosion. Avalanches	84	–	291	401	529	654	783	899	1013	1136	1253	1364
Shelterbelts. Hedges	85	185	292	401	529	654	784	899	1014	1136	1253	1365
Revegetation and reclamation	85	185	292	401	529	655	784	899	1014	1137	1253	1365
Other land use. Nature conservation. Arboriculture	85	186	292	404	530	655	785	900	1015	1139	1255	1365
Land–use and land–use policy and planning. Agroforestry	85	186	292	404	531	655	785	901	1015	1139	1255	1365
Nature conservation	87	189	294	409	534	658	790	905	1019	1146	1261	1370
Recreation, tourism and rural amenity	88	190	294	410	535	659	791	906	1022	1147	1262	1372
Arboriculture, urban amenity	88	191	295	410	536	659	792	906	1022	1148	1262	1372
Dendrochronology and dendroclimatology	88	191	296	410	536	660	793	907	1023	1149	1263	1375

AUTHOR INDEX 1377

SUBJECT INDEX 1429

List of source journals i

Errata

(Lines are counted from the beginning of the bibliographic data in each item)

Volume 56

Page	Issue	Abstract	Line	
541	6	4160	3	For "Ministério da Agricultura, Secretaria de Estado de Agricultura, Instituto Florestal" read "Instituto de Estruturas Agrárias e Desenvolvimento Rural (IEADR)"
892	8	6643	3	After "meliponíneos?" insert "In *Anais do 1° encontro sobro abelhas, de Ribeirão Preto, 02 a 04 de Junho de 1994, USP-Campus de Ribeirão Preto*"
1184	11	8730	1	For "Optical" read "Operator"

IMPORTANT NOTICE TO READERS

Over the past few years, the volume of forestry literature acquired by CABI has increased substantially owing to an expansion of our scanning list and the general trend towards more publications in this area. The sheer volume of literature was seriously impeding our efforts to provide a timely service to users, and a programme was proposed to catch up with all the work in hand during 1995 so that the CAB ABSTRACTS database and related products, such as *Forestry Abstracts, Agroforestry Abstracts* and *Forest Products Abstracts*, would be completely current in 1996.

Using a series of Focus Groups, comprising forestry librarians, researchers and other users of our products, we discovered that users would be willing to compromise temporarily on quality during 1995 to enable us to process a greater number of publications. This initiative was made possible by the successful implementation of a new production system at CABI's Wallingford Headquarters in 1994. The new system includes direct inputting of records on desktop workstations, automatic thesaurus term validation and fast release mechanisms to ensure high levels of consistency and quality. In addition, plans were agreed for processing the extra volume of work within the time frame.

In order to achieve this greater timeliness we have found it necessary to process much of the less recent literature directly onto the CAB ABSTRACTS database in 1995 without adding the information necessary for processing the printed journals. As a result, these records have not been published in the printed Abstract Journals (or their floppy disk equivalents), but are available **only** on CAB ABSTRACTS online, TREECD and CABCD. Any reader experiencing difficulty in accessing these records in electronic format should contact the editor.

For literature processed from 1 January 1996 we will be introducing new standards for timeliness and currency, as well as standards for accuracy, indexing consistency, subject coverage and customer support. It is our aim that *Forestry Abstracts, Agroforestry Abstracts* and *Forest Products Abstracts* will be second to none in terms of timeliness, currency, scientific quality and retrievability.

READERS' GUIDE

1. Terminology. Terms included in the *Concise Oxford Dictionary, Chambers Dictionary of Science and Technology* and the *Terminology of Forest Science, Technology, Practice and Products* are used without explanation. Other terms from particular sciences may also be used without explanation if it is thought that they are familiar to those readers likely to be concerned. Standard abbreviations, units and symbols, and some other abbreviations, are used where it is thought that they will present no difficulty.

2. Bibliographic Citations:

(a) Titles. Titles are given in the original language if a Latin alphabet is used. Russian (but generally not other Cyrillic alphabets) and Greek are given in standard transliterations for whole publications. English translations - often shortened - are given in square brackets.

(b) Language symbols. Capital initial letters indicate the language of the text, small letters the language(s) of the summary. The following abbreviations are used:

Af	Afrikaans	Eo	Esperanto	Ja	Japanese	Pt	Portuguese
Al	Albanian	Es	Spanish	Ko	Korean	Ro	Romanian
Ar	Arabic	Fi	Finnish	La	Latin	Ru	Russian
Az	Azerbaijani	Fr	French	Li	Lithuanian	Sh	Serbo Croat
Be	Belarussian	Gr	Greek	Lv	Latvian	Sk	Slovak
Bg	Bulgarian	He	Hebrew	Ma	Macedonian	Sn	Slovenian
Ch	Chinese	Hi	Hindi	My	Bahasa Malaysia/ Malay	Sv	Swedish
Cs	Czech	Hu	Hungarian			Ta	Tajik
Da	Danish	la	Interlingua	Nl	Dutch, Flemish	Th	Thai
De	German	In	Indonesian	No	Norwegian	Tr	Turkish
Ee	Estonian	Is	Icelandic	Pe	Persian	Uk	Ukrainian
En	English	It	Italian	Pl	Polish		

(c) Back References. These refer to notices in previous issues of CAB INTERNATIONAL abstract journals and appear in square brackets with an indication of volume and abstract number, e.g. [See*Forestry Abstracts 41*, 3456] [See *Forest Products Abstracts 3*, 1234].

(d) What an abstract contains.

An abstract contains various numbers and combinations of fields (items of information) depending on the document type. The sample abstract given below contains 9 fields which appear in the order indicated in the following list:

1 Abstract number
2 Author
3 Title in English
4 Original title if in Roman script
5 Journal or other document title
6 Year, volume, part and pagination
7 Language of text, language of summaries, and other bibliographic data
8 Organization where work was carried out
9 Abstract

> **1937** WIMMER, R. **[Physical and technological investigations of the wood of Scots pine trees damaged by fluoride.]** Physikalisch-technologische Untersuchungen am Holz von fluorgeschädigten Kiefern. *Holz als Roh- und Werkstoff* (1993) **51** (1) 7-13 [De, en, 36 ref. With English captions] Zentrum für Umwelt- und Naturschutz, Universität für Bodenkultur, Vienna, Austria.
>
> Dominant trees of Scots pine (*Pinus sylvestris*) 80-100 yr old from areas slightly or badly affected by an aluminium factory in Upper Austria were felled, and their wood properties compared. After excluding the effects of ring width and wood density, the wood of badly damaged trees exhibited reductions in modulus of elasticity in bending, bending strength, compressive strength, maximum tangential swelling and volume swelling. These reductions relate mainly to wood from the upper stem zone. However, these changes have no effect on the practical utilization of the wood.

LITERATURE FOR ABSTRACTING

CAB INTERNATIONAL (CABI) seeks to acquire the widest possible range of scientific literature relating to forestry and forest products. It therefore welcomes the recommendation of the IUFRO Executive Board that "authors should generally send a copy of their scientific publications to *Forestry* [and *Forest Products*] *Abstracts* for reference" as supporting CABI's efforts to record, publicize and make available forestry literature throughout the world, for the benefit of the forestry profession.

To this end, CABI has made co-operative acquisition arrangements with the Oxford Forestry Institute (OFI). All material should be addressed to:

Library and Information Service, Oxford Forestry Institute, Department of Plant Sciences,
University of Oxford, South Parks Road, OXFORD OX1 3RB, United Kingdom

After abstracting, most material is deposited permanently in the OFI Library, where it is made freely available for consultation. The Library also acts as agent for CABI's Document Delivery Service, and can supply photocopy or microform copies from most items in stock, subject to copyright regulations.

AUTHOR INDEX

Aalto, P. 5324
Aalto, T. 4022, 7663
Aalto, T. O. 1301
Aarathi, R. 1551
Aarde, R. J. van 3211
Aarnes, H. 8816
Aarnio, T. 7762
Aarssen, L. W. 549
Aas, G. 2, 6596
Abadie, W. 7903
Abaigar, T. 7516
Abalos R., M. I. 2525
Abbas, S. G. 213
Abbing, K. 6037
Abbot, P. G. 2689
Abbott, C. S. 4343
Abbott, I. 5194, 5703, 6653, 7426, 8337
Abbott, L. K. 5607
Abbott, R. J. 590
Abd El-Ghani, M. M. 4777
Abd. Jalil, H. A. 204
Abd Latib Senin 9420
Abd. Latif Mohmod 204
Abd. Razak Othman 6962
Abdul Malik 8908
Abdul Rahim, N. 7110
Abdul Rahim Nik 7110
Abdullah, M. D. F. 6939
Abduragimov, I. M. 9736
Abe, D. 9263
Abe, H. 400, 6411-6412, 8891
Abe, N. 6934
Abe, T. 3600, 9178
Aber, J. D. 326, 2506, 2790, 9731
Abetz, P. 918, 2687, 9525
Abeynayake, K. 5348
Abgrall, J. F. 2316
Abideen, K. A. M. Z. 9438
Abou-Awad, B. A. 9177
Abraham, C. T. 161
Abraham, K. F. 9208
Abraham de Vásquez, E. M. 1383
Abrahamsen, G. 754
Abrahamson, L. P. 6029
Abrahamson, W. G. 6525
Abramovich, A. 7828
Abrams, M. C. 3054
Abrams, M. D. 1265, 2206, 2408, 2842, 4692, 4709, 5914, 6562, 6763, 8813, 9916, 9951
Abril, A. 177
Absy, M. L. 3067
Abuelgasim, A. A. 1853
Acciaresi, H. 10108
Acciaresi, H. A. 6735, 10108
Accordi, E. M. M. 8839
Accordi, S. M. 2268
Acedo, C. 6403
Acero, N. 1923
Acevedo, E. 2989
Acevedo, H. 274
Acharya, C. L. 1088
Achenbach, H. 8915
Achi, C. A. 1156
Achmadi, S. S. 3346
Achtemeier, G. L. 3695
Acker, G. 9082
Ackerly, D. D. 6491, 7023
Ackerman, F. 7018
Ackerman, J. D. 276
Ackzell, L. 3439
Acosta, A. 2148, 3914
Acosta, M. 177
Adair, K. T. 7618
Adalsteinsson, S. 7056, 7971
Adam, G. 8085
Adam, M. D. 3208
Adam, P. 1312
Adamowicz, W. 9219
Adams, D. 9076
Adams, D. L. 6922
Adams, D. M. 5040
Adams, G. T. 7036
Adams, G. W. 4275, 9042
Adams, I. T. 4904
Adams, J. 7848
Adams, J. B. 3566, 7843
Adams, M. A. 3635, 3643
Adams, M. B. 1963
Adams, M. J. 4332
Adams, P. 2755
Adams, R. P. 2174, 3852, 5430
Adams, W. T. 4654, 4828-4829, 8215, 8217
Adams, W. W., III 6477
Adamson, H. 6490
Adamson, J. K. 353
Adappa, B. S. 1672
Adarsh Kumar 98, 101, 103, 8954
Addison, J. A. 1498
Adeleye, O. M. 3578
Aderkas, P. von 6591, 7359
Ades, P. K. 2504, 4869
Adesina, F. A. 4112
Adger, W. N. 8, 3341, 9649
Adhikari, B. S. 3052, 6540-6541
Adhikari, M. K. 7386
Adhikari, R. N. 713, 2395
Adiningsih, J. S. 3262
Ådjers, G. 5050, 6867, 7560, 7770, 7781
Adkisson, C. S. 3699
Adlard, M. W. 9979
Adlard, P. G. 6178
Adriaensen, F. 7514
Aescht, E. 136
Afek, U. 9076
Affleck, W. 5792
Afif, D. 459, 5953
Afzal-Rafii, Z. 2198
Agaponov, N. N. 938
Agapov, Yu. I. 9858
Agarwal, A. 20
Agarwal, G. P. 5710
Agasse, F. 1936
Agassiz, D. J. L. 7460
Agati, G. 1038
Agazzi, O. A. 1567
Agbodaze, P. K. 6444
Agboola, A. A. 8491
Agbu, P. A. 33
Agerer, R. 5614
Agestam, E. 5625, 7120
Ageta, H. 9820
Aggarwal, S. K. 2673
Aglionby, J. 8518
Agnew, A. D. Q. 3898
Agnihotri, R. C. 8397
Agnihotri, Y. 727
Agnoletti, M. 211
Agostinho, S. M. M. 3742
Agrawal, A. 6205
Agrawal, D. C. 5083
Agrawal, M. 2869, 2876
Agrawal, S. P. 9789
Aguiar, A. P. M. A. de 7352
Aguilar, M. A. 4744
Aguinagalde, I. 5487
Aguirre, J. L. 926-927, 3082
Agulló, M. A. 2051
Agúndez, D. 7719
Agustin, P. C. 8402
Ahern, C. P. 3729
Ahlbäck, A. J. 10118
Ahlholm, U. 7862
Ahlström, K. 3419
Ahmad, F. B. 2674-2675, 9566
Ahmad, I. 2257
Ahmad, K. J. 5316
Ahmad, S. 4121
Ahmad, Z. 4373
Ahmadi, A. A. 635
Ahmed, G. U. 6105
Ahmed, M. 1663
Ahmed, M. R. 6716
Ahmed, S. I. 5759, 5805, 7502, 9149
Ahn, J. K. 8205
Ahn, Y. J. 1813
Aho, J. 7033
Aho, M. L. 3131, 7039
Ahonen, T. 6351
Ahonen-Jonnarth, U. 6295
Ahrens, U. 2291
Aiba, Y. 1094, 1533, 4599
Aiello, A. 7458
Aikawa, Y. 8095
Aiken, S. R. 731
Aimers-Halliday, J. 4830
Aimi, N. 9821
Airaksinen, K. 2868
Aird, P. L. 5935
Aitken, S. N. 9047
Aitken-Christie, J. 8948, 9884
Aittola, J. P. 7989
Aizawa, S. 7055
Aizen, M. A. 1470, 4954, 6510
Ajab Singh 10024
Ajay Gulati 1654
Ajay Parida 8232
Akah, P. A. 201
Akama, A. 2852
Akao, K. 3529, 7016, 7857
Akashi, T. 9033, 9758
Akasi, T. 3123
Akbar, A. 859, 861, 903, 6063
Akbarinia, M. 6916
Akça, A. 2751
Aken'Ova, M. E. 8421
Akhileshwar Pathak 1
Akimoto, S. 7437
Akinnifesi, F. K. 6868, 7669
Akinsanmi, F. A. 7669
Akkapeddi, A. S. 5544
Akkermans, A. D. L. 3150, 8264
Akogo, G. M. 6196
Akrimi, N. 8420
Akyeampong, E. 2671, 8679
Al-Homaid, N. 1536
Al-Mana, F. A. 85
Al-Meshal, I. A. 3469
Al-Windi, I. 3572
Alakoski-Johansson, G. M. 6384, 6669
Alam, M. K. 810, 6418
Alam, M. S. 6017
Alanen, E. 7392
Alang, Z. C. 6877
Alaoui-Sossé, B. 3620, 3761, 6422
Alarcón, R. 2782
Alatou, D. 2993
Alazard, P. 6924
Alba-Avila, A. de 7476
Albaladejo, C. 5861
Albaladejo, J. 4002
Albarracin, C. G. 3929
Alberdi, M. 274
Albert, P. J. 2322, 5749
Albert, V. A. 5504
Albrecht, C. 3155, 3771-3772, 8272
Albrecht, W. 1218
Albrecht, W. A. 7114, 7651
Albrektson, A. 3460, 6182
Alcaide, M. T. 8034
Alcaide López, M. T. 8034
Alcántara Ayala, O. 7278
Alcaraz, A. H. F. de 6548
Alcaraz, F. 3082
Alché, J. D. 585, 7177
Alcoforado, M. J. 7133
Aldama, A. 4982
Alder, D. 6580
Aldred, A. H. 258
Aldrich, J. R. 5786
Alegre, J. C. 8491
Alekseev, A. S. 4569
Alemdag, I. S. 8478
Alexander, C. E. 10083
Alexander, I. J. 4847, 6618
Alexander, J. 6298
Alexander, J. D. 8934
Alexander, L. D. 1250
Alexandre, A. E. 8778
Alfani, A. 7908
Alfaro, R. I. 638, 7497
Alfred, J. R. B. 6687
Alge, G. 7886
Ali, A. K. S. 7041
Ali, I. 3873
Ali, M. 6060, 6717
Alía, R. 7719
Alig, R. J. 1642, 2728, 5040
Alikhan, Q. R. 6607
Alimanar, M. 6926, 6939
Alind Rastogi 3358, 7696
Alizoti, P. 4274
Allais, J. P. 5765
Allan, K. 6739
Allard, B. 8795
Allaway, W. G. 2041, 3883, 5597
Allbrook, R. F. 4394
Allegro, G. 6652
Allen, H. L. 1158, 2011, 5355, 5944
Allen, J. A. 1887, 5402
Allen, O. B. 1591
Allen, P. J. 6166
Allen, R. 6745, 6999
Allen, R. B. 4756, 6560
Allen-Johnson, L. 5809
Alles, D. 634
Alliano, R. C. 835
Allison, B. E. 4101
Allison, S. M. 5180
Allison, T. B. 3093
Allorge, L. 3846
Allred, W. S. 6672, 8359
Allué, M. 1876, 8613
Alm, J. 7783
Almeda, F. 9904
Almeida, A. F. de 7133, 7289
Almeida, B. F. de 6180
Almeida, É. C. de 9898
Almeida, J. C. C. 6723
Almeida, M. H. 1890
Almeida, V. V. 6878
Almeida Alves, T. M. de 9798
Almeida Filho, R. 7843
Aloni, R. 6413
Alono, O. 4009
Alonso, M. 6463
Alonso, R. M. 1458
Alonso Padron, R. M. 1458
Aloo, I. 10047
Aloo, I. K. 633
Alrasyid, H. 1789
Alriksson, A. 7890
Alskog, G. 5587
Alstad, G. 4598
Alt, D. 1147
Altenkirch, V. W. 5767
Altieri, A. 5341
Altrichter, C. 4565
Aluri, R. J. S. 9867
Alvarado, B. 2496
Alvard, M. 5816
Alvarenga, A. A. de 9440
Alvarez, A. 1434, 1556
Alvarez, I. F. 5615
Alvarez, J. 1474, 3082
Alvarez, L. 1556
Alvarez, M. 1763
Alvarez, R. 2766
Alvarez-Buylla, E. R. 5538, 7327
Álvarez-Jiménez, J. 926-927

Alves, E. S. 6325
Alves, J. B. 5713
Alves, R. J. 9838
Aly, M. K. 3372
Amacher, G. S. 3347
Amano, H. 667
Amar, F. 9635
Amaral, I. L. do 3566
Amaranthus, M. 3589, 5567
Amaranthus, M. P. 2243
Amarell, U. 6340
Amat, J. A. 477
Amateis, R. L. 4207, 5148
Amatya, S. M. 2461, 6947, 6966, 7462, 8490, 9285
Ambasht, R. S. 356, 3154, 4531, 5310, 5568
Ambaskar, P. D. 5191
Amblès, A. 1913
Ambrogioni, L. 9182
Ambros, Z. 339
Ambrosini, I. 6715, 9626
Amelung, T. 5863
Amigo, J. 3903
Aminah, H. 2602, 6046, 6890
Aminah Hamzah 1128, 7730
Aminuddin 199, 8687
Aminuddin Mohamad 976
Amirault, J. M. 4008
Amirov, F. A. 1004
Amitar Baviskar 5993
Ammer, C. 1538
Ammer, S. 1105
Ammer, U. 1472, 4964, 6749, 6869, 7552, 7565
Ammon, V. 5651
Amo-Marco, J. B. 3395
Amor, D. 1242
Amor, J. C. 9136
Amorini, E. 8608-8609, 8616
Ampié, E. 3969
Amram, O. 9631
Amsallem, I. 3763
Amthor, J. S. 313, 3328, 8924
Amundson, R. G. 1977, 6464
Anagnost, S. E. 495
Anami, H. 2339
Anamthawat-Jónsson, K. 9056
Anan Polthanee 7567
Anand Prakash 5897
Ananthakrishnan, T. N. 628
Ananthapadmanabha, H. S. 1689, 2099
Anase, M. 8435
Anaya Garduño, M. 8491
Ancízar Rodríguez, F. A. 9288
Andelt, W. F. 3199
Anderberg, A. A. 3044
Anderbrant, O. 5739, 5763, 7504
Andersen, A. N. 378, 623
Andersen, B. R. 7650
Andersen, C. P. 2865
Andersen, P. C. 8329
Andersen, R. 6694
Anderson, A. B. 1173, 5188
Anderson, C. 10038
Anderson, D. J. 4426
Anderson, D. M. W. 2979
Anderson, H. A. 5353
Anderson, H. M. 8148
Anderson, J. 8516, 8771
Anderson, J. B. 2261
Anderson, L. 3649
Anderson, M. A. 7127
Anderson, M. L. 1318
Anderson, M. O. 4138
Anderson, N. A. 9997, 10011
Anderson, O. F. 5827
Anderson, P. 1069, 7655
Anderson, P. D. 2828, 7093
Anderson, P. M. 3289
Anderson, R. L. 2278-2279, 2729, 2872, 3173, 9351
Anderson, R. S. 3893, 8147
Anderson, T. H. 7933
Anderson, T. S. 7138
Anderson, W. R. 9906
Andersson, B. 1431, 5233
Andersson, L. 5836
Andersson, S. 5583, 6616
Ando, Y. 4174
Andoljšek, J. 2630
Andrade, G. I. 3222
Andrasko, K. J. 2795
André, H. M. 5037
André, J. 3437, 3688, 5270
André, J. P. 2049
André, M. 5757
Andreadis, T. G. 2330
Andreassen, K. 9489
Andreassian, V. 9394
Andrén, H. 694, 2390
Andréoli, C. 1460
Andrés, B. de 7177
Andresen, J. W. 10142
Andrew, I. A. 4824
Andrews, J. A. 5295
Andrews, S. 7248
Andrievskaya, T. M. 2564
Andrzejczyk, T. 8179
Aneja, V. P. 6356
Anekonda, T. S. 3014
Anev, V. N. 783
Aneyan, P. 8552
Anfinson, S. R. 5288
Anfodillo, T. 3615, 4523
Ang, B. N. 5736
Ang, L. H. 3239
Angeli, F. 698
Angelis, P. de 1037-1038, 7194
Angelsen, A. 5868
Angelstam, P. 9941
Anhar Suki 7109
Anikin, A. S. 2652
Anil Kumar 3689, 4336
Anim-Kwapong, G. J. 8390
Aninuddin Mohamad 7714
Aniśko, T. 800
Anisur Rahman 2458
Anjan Sengupta 284
Anjly Pancholy 2234
Anko, B. 2476
Annals of the Missouri Botanical Garden 8484
Annesi, T. 1467, 5118
Anoliefo, G. O. 2568
Anoop, E. V. 161
Ansari, S. A. 9443
Anselmi, N. 8319
Ansín, O. E. 10108
Ansley, R. J. 2491
Ansseau, C. 3910
Anstett, M. C. 8956
Antal, M. 2896
Anthony, R. G. 7522
Antolín Tomás, C. 7859
Antonaroli, R. 9126
Antonov, E. I. 1751
Antorrena, G. 6456
Antos, J. A. 539
Antronico, L. 9238
Anttila, L. S. 6669
Anttonen, S. 3653
Antuf'eva, E. D. 4415
Anup Chandra 155
Anurag Raizada 1942
Anuvrat Sharma 4375
Anwar, A. 1805, 2378
Anwar, C. 2158-2160
Anzani, P. 1286
Anziani, M. P. 3340
Aoi, T. 7529
Aoki, T. 3143
Ap Rees, T. 9853
Aparicio, M. A. 8355
Apel, K. 1251, 1279
Apeland, I. 9878
Apeldoorn, R. C. van 6693
Aphalo, P. J. 8098
Apiolaza, L. 8237
Aplet, G. 2951
Aplet, G. H. 3103, 5455
Appanah, S. 777, 8127
Appel, D. N. 1457, 4862, 4877
Appel, H. M. 7508
Appelgren, M. 6056, 8581
Appendino, G. 9800, 9806
Appiah-Kwarteng, J. 5420
Applegate, G. B. 3233, 4168
Appleton, B. L. 742
Apps, M. J. 3623, 9943
April, R. 5355
Apsimon, H. 1950
Apud, E. 822
Aquila, C. 6750
Aquilo. Ser. Botanica 8479
Ara Lazaro, P. 5961
Aradhya, K. M. 4839
Aragami, K. 6545
Arahira, M. 439
Arai, Y. 9820
Araki, D. 4368
Araújo, C. 8048
Araujo, F. D. de 8038
Araújo, M. C. 4752, 7913, 8048
Araujo, P. R. da 291
Araus, J. L. 1880
Aravanopoulos, F. A. 5523, 5553
Araya F., C. 4146-4147
Arbaugh, M. J. 7107
Arbez, M. 2176, 3966
Arbuzova, O. N. 3890
Archer, P. 2487
Archer, R. R. 4585
Archer, S. 7323
Arcos J., M. R. 1212
Ardö, J. 6233, 7840
Arduini, I. 8793
Arello, E. F. 5081
Arends, E. 5458
Areola, O. O. 8022
Ares, A. 225
Argal, G. 879
Argenti, G. 3273
Arghanova, V. S. 7977
Argillander, S. 7092
Argillier, C. 5576
Arheimer, B. 5836
Ariano, R. 6006
Arias, J. A. 9300
Arias G., F. 1473
Arihara, S. 9831
Arima, T. 4386
Arista, M. 489, 3841, 9024
Ariz, F. 879
Arkhipov, V. I. 9858
Armand, D. 2152
Armăşescu, S. 8661
Armesto, J. J. 2930, 3219, 5296
Arminder Singh 3854
Armleder, H. M. 239
Armocida, D. 7179
Armolaytis, K. 8796
Armstrong, A. J. 3210
Armstrong, G. 6838
Armstrong, J. A. 9190
Arnal, S. 5488
Arnaud, Y. 2591
Arndt, J. L. 8791
Arnebrant, K. 5583, 5604
Arner, S. L. 3351
Arno, S. F. 9105
Arnold, G. M. 6097
Arnold, J. E. M. 4166
Arnold, M. A. 2588, 6072
Arnold, N. 6250
Arnold, R. J. 3125-3126, 8549, 9557
Arnold, S. von 3133, 3405, 3759, 5502, 6049, 8231
Arnolds, E. 3590
Arnolds, E. J. M. 5627
Arnone, J. A., III 2230
Arnott, J. T. 1723-1724, 3563, 6258
Aronen, T. 4833, 5404
Aronen, T. S. 2942
Aronne, G. 3830
Arp, P. A. 1973, 1979, 4142, 5250, 6346, 8009, 8856
Arrabal, C. 3047
Arriaga, L. 4773
Arrigoni, M. de. F. 9440
Arrigoni, P. V. 5438
Arris, L. L. 3061
Arrizabalaga, A. 2393
Arroyo, J. 7298
Arsenault, A. 6544
Arseneault, D. 514
Artavia, D. 9814
Arteca, R. N. 863, 2679
Arteel, G. E. 8683
Arthaud, G. 6234
Arthur, D. 5567
Arthur, M. A. 2824, 4195
Arulmozhian, R. 2237
Arvanitis, L. G. 1027
Arvieu, J. C. 5576, 8257
Arvigo, R. 745
Arya, I. D. 6047
Arya, S. 6047, 9050
Arya, S. R. 3388
Arzeni, C. B. 205
Ås, S. 1471
Asai, F. 9810
Asai, T. 426
Asakawa, Y. 1235
Asanga, C. A. 9293
Asbjornsen, H. 8139
Asbury, C. E. 1067, 2789, 6292
Asciuto, A. 6377
Ash, E. C. 6927
Ash, J. 2132
Ash, J. E. 2798, 6300
Ashby, W. C. 6096
Ashe, P. 5682
Asheem Srivastav 9389
Ashford, A. E. 5597
Ashley, M. V. 9061
Ashok Goswami 1734
Ashokan, P. K. 7729
Ashton, D. H. 3954
Ashton, M. S. 7022
Ashton, P. M. S. 921, 935, 3431
Ashton, P. S. 7681
Ashutosh, S. 2786
Ashwani Kumar 9248
Ashwath, N. 7718
Ashworth, E. N. 272, 275, 8757
Asiegbu, F. O. 5629
Askne, J. 3518
Asp, H. 6478, 7056, 7971, 9788
Aspinall, P. 9552
Asplund, D. 1628
Assael, F. 8330
Asselin, A. 3772
Asselin, M. 7078
Asta, J. 3021
Astrologova, L. E. 1400
Åström, B. 5643, 8317
Ata, C. 6804
Atamuradov, K. I. 5919
Atanackovic, A. 7117
Atanasov, A. 5084
Atauri, J. A. 3871
Atger, C. 404, 7164
Atirattanapunya, W. 1775
Atkins, L. 7413
Atkinson, C. J. 1970, 1988
Atkinson, D. 1439, 10000
Atkinson, M. D. 386
Atmawidjaja, R. 3346
Atta-Krah, A. N. 8421
Atteia, O. 4552
Attiwill, P. M. 3643, 7137, 9231
Attree, S. M. 119, 1228, 5945, 7357, 7740
Atzmon, N. 448, 1716, 2964-2965
Auclair, D. 149, 5885, 5888, 9356
Audran, J. C. 2579
Audru, J. 1598-1600
Auer, C. G. 2271
Auerswald, K. 8830
Auger, M. A. 627, 4667, 5765
Augeri, G. 6006
Augspurger, C. K. 483
Auken, O. W. van 550, 7255, 9013
Auld, T. D. 4928, 7324, 8036
Aunós, A. 809
Ausborn, D. 8406
Aussenac, G. 1928, 2830, 3809, 4180, 6470, 6907, 7066
Aust, W. M. 3452, 4579
Austin, M. 6713
Austin, M. P. 3329, 3332
Austin, M. T. 7168

Australia, Australian Bureau of Agricultural and Resource Economics 6999
Australia, Department of Conservation and Land Management 7617
Australia, Forestry Commission, Tasmania 6791
Australia, Resource Assessment Commission 2527
Auxtová, O. 6486-6487, 8925-8926
Avemark, W. 9865
Averbeke, A. van 9185
Avery, C. C. 1840
Avery, P. P. 5354
Avila, A. 5249, 7548
Avinash Jain 7456
Avolio, S. 6391, 8611
Avrov, F. D. 4755, 5492
Awanchiri, S. S. 8911
Awang, K. 3240, 3846, 5050, 6867, 9420
Awasthi, A. K. 4268
Awaya, Y. 9633
Awokunle, H. O. 7878
Awonaike, K. O. 1289, 6321
Awuku, F. A. 6402
Axelrood, P. E. 4854
Axelsson, A. L. 5890
Ayers, A. J. 6950
Ayers, G. S. 6950
Aymard C., G. A. 9901
Ayres, J. M. 6838
Ayres, M. P. 2363, 2933, 5712
Ayuwat, D. 5035
Ayzanoa, G. E. 7685
Azcón, R. 5596
Aziz, A. Y. 10023
Azizah Hashim 3241
Azmi, M. I. 1497
Azuma, D. L. 8033
Azuma, T. 4278
Azzena, M. 4293, 6066
Azzi, A. 5974
Bă, A. M. 2248
Baar, J. 2245, 9074
Baart, A. C. 7105
Baas, P. 350, 2045, 8906
Bååth, E. 7939
Baba, K. 425, 1248, 2215
Baba, M. 7999
Baba, T. 8653
Babaev, A. 2405
Babeux, P. 917, 923, 6116
Babich, N. A. 232
Babu, C. R. 2242, 6880
Babu, S. C. 6720
Babushkina, L. G. 1962
Baccalá, N. 3019
Baccetti, C. 9141
Bach, C. E. 5742, 5744, 5747
Bach, F. R. 1436
Bachelard, E. P. 3573, 3765, 8806
Bachmann, G. 7922
Bachmann, M. 1007
Bachmann, P. 38, 370, 6809
Bachtiar, A. 1776
Bačić, T. 2045
Bacilieri, R. 594, 4317
Back, E. 8185
Bäck, J. 3647, 5956-5957, 7079, 7098
Backeljau, T. 5717
Backéus, I. 3905
Backman, R. 1262
Bacon, P. E. 3603, 5681
Baconguis, S. R. 5838
Bader, P. 7254
Badot, M. J. 6353
Badot, P. M. 1172, 1935, 3711, 5280, 6065, 6353
Bae, W. I. 9163
Baer, N. W. 2550
Baerts, M. 980
Baeza, M. J. 1746, 1826
Bagaev, E. S. 1818
Bagchi, S. K. 556, 3141
Baggett, K. L. 10001
Bagnaresi, U. 6249
Baguette, M. 4909
Bagyaraj, D. J. 4011, 4851, 5600, 6617
Bagyaraj, J. D. 4851
Baharuddin, K. 7110
Baharuddin Kasran 7110
Bahrman, N. 8222
Bahuguna, V. K. 140, 5114, 6197, 9470
Bai, B. 9193
Bai, B. B. 5723
Bai, L. N. 8512
Baidya, K. N. 7628
Baïer, M. 3757
Bailey, K. 2084
Bailey, R. L. 2686, 8695
Bailey, R. R. 1911
Baillères, H. 5375
Baillie, M. G. L. 9315
Bain, J. 679
Bainbridge, D. A. 6712
Baines, D. 2392
Baines, M. M. 2392
Baird, I. A. 7134
Baizhong, L. 8069
Bajaj, Y. P. S. 749
Bajo, S. 7958
Bajpai, A. 7810
Bajpai, A. K. 198, 984
Bajrang Singh 3482
Baker, A. C. 6319
Baker, C. 5374
Baker, D. D. 2230, 2232, 6307, 8500, 10002
Baker, D. G. 1332
Baker, D. L. 3199
Baker, G. 6092
Baker, H. G. 2928
Baker, J. R. 3519
Baker, P. S. 7439
Baker, T. R. 1158
Baker, W. L. 383, 4131, 7549, 7822
Bakke, A. 2348
Bakken, S. R. 8455
Bakker, D. J. 7105
Baklanov, A. A. 7091
Baksha, M. W. 6666
Bakshi, M. 98, 103, 3400
Bakwin, P. S. 8924
Balagopalan, M. 6279, 9686
Balakrishnan, M. 7626
Balandier, P. 7580
Balandrin, M. F. 746
Balansard, G. 9799
Balanzin, D. 1649
Balasubramaniam, S. 416, 1373-1375
Balasubramanian, P. 696
Balasubramanian, R. 2341
Balatinecz, J. J. 4241, 8201
Balázs, A. 7983
Balbir Kumar 9249
Balcar, P. 2567
Balciunas, J. K. 6933
Baldan, B. 2055, 6421
Baldassarre, G. A. 6682
Balder, H. 4979, 7607, 8299
Baldini, S. 8553, 8617, 8671
Baldocchi, D. 1620
Baldock, J. A. 7793
Baldridge, L. P. 5113
Baldwin, E. 3564, 5155
Baldwin, P. J. 8490
Baldwin, S. B. 4246
Baldwin, V. C. 4587
Baldwin, V. C., Jr. 2927, 3331, 3453
Baldy, C. 10111
Bale, C. L. 2817
Balesdent, J. 5240
Balfour, D. A. 3946
Balick, M. 745, 2782
Balick, M. J. 9569
Balisky, A. C. 1814, 6900
Balk, G. 7653
Ball, E. 2990
Ball, G. E. 8087
Ball, J. 4136, 4462, 5196
Ball, J. P. 10029
Ball, J. T. 7662
Ball, M. C. 3442, 6300, 6553
Ball, T. 5302, 7967
Ballal, S. R. 3986
Ballardini, P. 3247
Balle, P. 8431
Ballester, A. 3395, 8580
Ballinger, R. E. 6696
Ballon, P. 1740
Balneaves, J. 4342
Balocchi, C. 6027
Balocchi, C. E. 3128
Balogun, R. T. 3578
Balsamo, R. A. 6424
Balslev, H. 3072, 3952
Baltisberger, M. 6596
Bambozzi, C. 9308
Bambridge, L. 7998
Bamkin, K. L. 4062
Bamola, B. K. 7290
Bana, O. P. S. 1678
Banana, A. Y. 8414
Bañares, A. 8440
Banaszak, R. 2376
Bancroft, G. T. 4059, 6721
Band, L. E. 4084
Banda, A. Z. 3256
Bandara, C. M. M. 768
Bandara, G. D. 5782
Bandyopadhyay, J. 9564
Bandyopadhyay, S. 3272
Banerjee, P. K. 632, 2313
Banerjee, S. 4968
Banerjee, S. K. 2699, 3246, 4313-4314, 4334, 4949, 8627, 9250
Banerjee, S. P. 2065
Banerjee, U. K. 96, 4968
Baneva, N. A. 8060
Bangarwa, K. S. 1737, 1993, 9064, 10107
Bangerth, F. 8923
Banik, R. L. 6076, 6419
Bank, H. van der 7378
Bank, M. van der 7378
Banko, T. J. 7606
Banks, D. I. 4804
Banks, J. C. G. 4174
Bannister, M. H. 4817-4821
Bannister, P. 4271, 8761
Bansal, M. 5605
Bansal, S. 2875
Bapat, V. A. 419, 6033
Bara, S. 6463, 8883
Barabin, A. I. 854
Baradat, P. 3567, 4882, 9970-9971
Barajas-Morales, J. 2022
Baral, J. C. 7584
Barataud, F. 7951-7952
Barbas, E. 2587
Barber, K. N. 8353
Barber, L. R. 4045
Barber, R. G. 8006
Barbéro, M. 3939, 9921
Barbier, E. 5860
Barbier, E. B. 4956, 7587
Barbolani, E. 1249
Barboni, L. 9800
Barbosa, D. C. A. 1111-1112
Barbosa, M. H. P. 5081
Barbour, M. G. 6557
Barbour, R. J. 6364
Barclay, H. J. 4301
Bare, B. B. 4426
Bargali, S. S. 7973
Barigah, T. S. 4401
Baritz, R. 8866
Barker, P. A. 3392, 4978
Barker, P. C. J. 2012, 3953, 7395
Barklund, Å. 1627
Barklund, P. 4169
Barkova, L. I. 8635
Barlow, H. S. 6254
Barnard, E. L. 5057, 6927
Barneby, R. C. 4740
Barnes, A. 6855
Barnes, D. 9264
Barnes, D. S. 7553
Barnes, K. L. 4048
Barnes, R. D. 1425, 6866, 7351
Barnes, R. F. W. 4048
Barnes, T. G. 3208
Barnett, J. P. 1747, 2464, 5127, 7346
Barnett, J. R. 2043, 2599
Barnola, P. 2993, 3620, 3761, 6422
Baron, J. S. 3625
Barr, A. G. 6262
Barr, C. J. 5848
Barrado, E. 8788
Barrales M., L. 6184
Barrance, J. J. 9255
Barre, A. 5563
Barreiros, H. de S. 9894
Barrell, J. 10139
Barrena Arroyo, V. 6578
Barrera T., E. 1469
Barrero, A. F. 5400
Barrerta, M. D. 3081
Barresi, P. A. 2528
Barret, T. M. 4199
Barreto, L. S. 6827-6828, 6831-6832
Barreto, P. 7568
Barrett, D. J. 6300
Barrett, D. R. 3535
Barrett, J. P. 4963, 8509
Barrett, J. W. 3301
Barrett, S. W. 7131
Barrick, K. A. 3638
Barrière, G. 4638, 5519
Barrio, G. del 7516
Barrios, M. 9814, 9828
Barron, M. G. 6380
Barros, S. A. de 4283
Barros R., D. 3425
Barrows, E. M. 7505
Barrueto, P. 7335
Barry, D. 4450
Barry, T. N. 9226
Barszcz, A. 7171
Barták, M. 7088
Bartareau, T. 3089
Bartela, C. 9337
Bartelink, H. H. 797, 4179
Barthel, R. 7936
Barthelemy, D. 9356
Barthlott, W. 5333, 7969, 9923
Barthod, C. 769, 1159, 2518, 2792, 3818, 5049, 6864, 8557
Bartle, G. A. 3596, 4079
Bartle, K. D. 8499
Bartlett, A. G. 6742
Bartlett, R. M. 1413
Bartlett, T. 10142
Bartol, R. 3365
Bartoli, G. 7908
Bartoli, M. 2638
Bartolomé, C. 926-927
Bartolome, J. W. 7305
Barton, A. M. 3053
Barton, J. L. 6358
Barton, K. 452
Bartsch, N. 1742, 7950
Bartuněk, J. 10
Barua, I. C. 8959
Barua, R. S. 142
Bary-Lenger, A. 949, 4159, 8860
Barzdajn, W. 852
Basák, A. B. 6636
Basak, A. C. 6633, 6638
Basak, U. C. 8235
Basavaraju, T. B. 9559
Bascialli, M. E. 6306
Báscones, J. C. 2142
Başer, K. H. C. 9804
Basher, L. R. 3909
Bashford, R. 6656, 7424
Bashkin, V. N. 1951
Baskent, E. Z. 236, 6199
Basnet, K. 1219, 3561
Basset, Y. 624
Bassett, C. 7588
Bassman, J. H. 2627
Bassow, S. L. 3547
Bassuk, N. 3287
Bassuk, N. L. 5286, 5907-5908, 6390, 6755
Bastable, H. G. 8870

Bastien, C. 4667, 6894
Bastien, J. C. 8215, 9421
Bastien, Y. 6936
Basu, P. K. 9933
Basu, P. S. 5589
Basu, S. K. 1574
Bate, N. 7355
Bateman, M. 4353
Bates, P. C. 1839
Bates, R. M. 6073
Bathgate, J. L. 4394
Batič, F. 8974
Batmanian, G. 1012
Batra, L. 5298
Batschauer, A. 3973
Battigelli, J. P. 3591
Battista, C. di 5595
Battisti, A. 4043, 5804, 6663, 9174
Battle, G. 1425
Battles, J. J. 1169
Batzer, H. O. 5701
Bauce, E. 2322, 5750
Bauch, J. 2897, 5345, 7647
Baucher, M. 2087, 7377
Bauer, G. P. 2713
Bauer, H. 1886
Bauer, M. E. 7005
Bauhus, J. 892, 7936, 7950
Baulies, X. 6228
Baum, D. A. 6512, 8970
Baumann, S. E. 4963
Baumer, M. 9927
Baumgartner, D. C. 1054
Baumgartner, D. M. 53
Bäumler, A. 4198
Bäumler, R. 6314
Bavcon, J. 5335
Baviello, G. 1676
Baviskar, A. 5993
Bawa, K. S. 2111, 3034, 3139, 5425, 6597-6599
Bayer, R. J. 9062
Baylac, M. 7419
Bayle, B. 1026
Baylis, B. 60
Bazazz, F. A. 3099
Bazin, P. 5844, 5847
Bazykina, G. S. 5853
Bazzani, M. 1038
Bazzaz, F. A. 1155, 3547, 4794, 4800, 6426, 6491, 7023, 7868
Bazzocchi, I. L. 4744
Beadle, C. L. 1717, 3463, 6190
Beale, J. D. 9125
Bean, A. R. 3859-3860, 7242
Beare, M. H. 7929
Beasom, S. L. 3201
Beatley, T. 8443
Beaty, K. G. 3678, 8884
Beaubien, Y. 7484
Beauchesne, P. 4072, 9597
Beaudoin, A. 3516, 3520, 9635
Beaulieu, J. 559, 3983, 5491, 8197, 9871
Beaulieu, P. 243
Beaupied, H. 8081
Beaury, P. 6928
Bécard, G. 8282
Beccu, E. 6158
Becerra, J. X. 5751
Bechtold, W. A. 2729, 3314
Beck, E. 3006
Beck, H. W. 2434
Beck, J. A. 8028
Beck, J. A., Jr. 4172
Beck, S. 5525, 6601
Becker, C. D. 8414
Becker, M. 890, 3090, 3290, 3811, 3819, 4466
Becker, P. 619
Becker, T. 8744
Beckett, R. P. 9476
Becquer, T. 4717
Becwar, M. R. 7737
Bedell, J. P. 5577
Bedell, P. E. 2448
Bédéneau, M. 4398
Bedford, D. J. 3853
Bedford, L. 4172, 6106
Bedker, P. J. 8302
Bednar, L. 5567
Bednar, L. F. 10161
Bednářová, E. 7061
Bednarz, T. 343
Beeckman, H. 6821
Beek, H. van de 4474
Beentje, H. J. 8963
Beer, T. 368, 4607
Beerling, D. J. 2794, 3538, 4706, 8061
Beeson, C. F. C. 5
Beeson, R. C., Jr. 1733, 6756
Beets, P. N. 1135, 4174, 4542, 4597, 5293, 7664
Beetson, T. B. 5052
Bégin, J. 4412, 9597
Bégin, Y. 3111
Bégué, A. 3546
Behaim, D. von 10110
Behling, H. 2129
Behm, A. 6511
Behrendt, U. 121
Beiderbeck, R. 6881
Beier, C. 330, 3581, 3632, 3664, 5321, 6354, 7650, 7819, 8001
Beier, P. 6683
Bekele, T. 3897
Bekku, Y. 8768
Bekunda, M. A. 3151
Bel, A. J. E. van 7178
Belaib, D. 5116
Béland, M. 1729, 4361
Bélanger, L. 251, 4072, 4903, 9597, 10072
Belanger, R. P. 10021, 10056
Belbin, L. 6713
Belcher, B. 4101
Belcher, M. 6862
Belcher, R. E. 6272
Belczewski, R. F. 8856
Beldt, R. J. van den 7384, 8383
Belevtseva, N. A. 10020
Belghazi, B. 8862
Belgrand, M. C. 7074
Beligne, V. 8721
Belkacem, S. 8779
Bel'kov, V. P. 8635
Bell, A. B. 9270
Bell, C. D. 4245
Bell, D. T. 67, 76, 3138, 6572, 8180
Bell, J. C. 591
Bell, R. 260, 2814
Bell, R. E. 3748
Bell, R. W. 6573, 8141
Bell, W. E. 86
Bellairs, S. M. 76
Bellari, C. 8571
Bellarosa, R. 9899
Belli, K. L. 5213, 9575
Bellinger, M. D. 2303
Bellingham, P. J. 1080, 1891
Bellmann, H. 4743
Bello, M. 1242
Bellocq, M. I. 2359
Bellot, J. 776
Bellstedt, D. U. 3778
Belosi, A. 2711
Belsheim, K. 5218
Belsky, A. J. 3904, 4601
Belsky, J. M. 7803
Belt, G. H. 4930
Beltz, R. C. 1022
Belvedere, M. 3194
Belyaev, V. V. 5108
Ben Nasri-Ayachi, M. 5381
Benabid, A. 3939, 9921
Benavides Meza, H. M. 741
Bencivenga, M. 6609
Bender, G. 4912
Bendix, J. 3916
Bene, G. del 9140
Benecke, U. 6092
Benes, S. E. 7093
Benet, H. 8306
Bengston, D. N. 7704
Bengtsson, B. 39
Bengtsson, J. 770, 4535
Beniwal, R. S. 5561
Benkert, R. 3601
Benkman, C. W. 8125
Benko, M. 4453
Bennett, B. 2782
Bennett, C. W. 9643
Bennett, D. L. 9246
Bennett, E. L. 3086
Bennett, E. M. 3855
Bennett, I. J. 1695, 3138
Bennett, J. P. 2872
Bennett, J. W. 1052
Bennett, M. 5987
Bennett, W. S. 8651
Bennink, J. 6298
Bennison, T. 8401
Bensimon, C. L. 6106
Benskin, H. 4172, 6106
Benson, C. A. 2028
Bentley, W. J. 5792
Bentley, W. R. 6790
Bento, E. de S. 9838
Bentz, S. E. 2265, 8137
Benussi, P. 1649
Benyamini, Y. 8885
Benz, G. 7488
Berbigier, P. 700-701, 4469, 5223
Bercetche, J. 8578, 9034
Berch, S. M. 3591
Béreau, M. 4640
Béres, C. 7070
Beresford, J. D. 711
Berezovskaya, F. S. 6836
Berg, Å. 4126
Berg, B. 3580, 3583, 6281, 6285, 9700-9701
Berg, D. R. 5850
Berg, E. E. 1931
Berg, R. H. 5382, 5586
Bergallo, H. G. 9215
Bergan, J. 9413
Berganton, A. do V. 2570
Bergdahl, D. R. 9180, 9677
Bergen, S. D. 4977
Bergen, V. 8744, 9380
Berger, F. 3227
Berger, K. 5076
Berger, R. von 7487
Berger, T. W. 5309
Bergeron, J. F. 252
Bergeron, Y. 251, 1357, 3064, 3434, 3834, 4361, 4787, 4789, 6800
Bergerud, W. A. 9503
Berghe, D. vanden 6952
Bergin, D. O. 69, 4942
Bergmann, B. A. 5094-5095, 5666
Bergmann, C. 4546, 5130
Bergmann, F. 558, 7361, 9856
Bergmann, J. H. 4322
Bergsten, U. 3382, 3387
Bergström, R. 7523
Berguson, W. E. 1839, 4781
Berhaman, A. 7229
Beringer, J. 4370
Berisford, C. W. 5728, 6451
Berjak, P. 839, 3385-3386, 3389
Berke, P. R. 8443
Berkemeier, R. L. P. 1797
Berkes, F. 3085
Berkowitz, A. R. 7308
Berkutenko, A. N. 2153
Berli, S. 4760
Berlyn, G. P. 3731
Bermadinger-Stabentheiner, E. 8050
Bermédez de Castro, F. 1897
Bernard, C. 8423
Bernard, E. 572
Bernard, R. 7009
Bernardez, I. 8883
Bernards, M. A. 2019, 8101
Berne, A. 1050
Bernhard-Reversat, F. 1912, 6980
Bernicchia, A. 10006
Bernier, L. 9124
Bernier, N. 3437, 3588, 3688
Bernier, P. Y. 1110, 3608, 4519, 4615, 5230, 6082-6083, 8931
Berninger, F. 5284, 7146
Berntson, G. M. 2020, 2034, 6263, 6426
Berrang, P. C. 9670
Berrios, M. del C. 1483
Berrios, S. 2789
Berry, A. M. 1447, 5587, 5906
Berry, P. E. 7234, 9902
Berryman, C. A. 1266, 3597, 8937
Bersier, L. F. 5824, 9206
Bert, G. D. 2091, 3290
Bertagnolii, C. L. 5661
Bertault, J. G. 6106
Berthelot, A. 6912-6913, 8632
Berthelsen, B. O. 8019
Berti Filho, E. 2326, 2364, 3181
Bertling, I. 8923
Bertolotto, C. 9271
Bertolucci, F. L. 8248
Bertram, S. L. 656, 7475
Bertrand, A. 278
Bertrand, H. 1208
Bertrand, L. 9597
Bertsch, P. M. 3685
Besana, J. C. 1910
Beschovski, V. L. 643
Besendorfer, V. 5950, 7368
Besford, R. T. 1879
Besse, F. 8535
Bessette, G. 5275
Bessie, W. C. 6375
Bessière, J. M. 6439, 9802
Bestebroer, S. 1971
Beswick, K. M. 333
Betances, M. 6088
Betancourt, M. A. 1763
Bethge, K. 5372, 10152
Bethge, K. A. 7114, 7651
Bettarini, I. 7031
Betters, D. R. 6723
Bettinger, P. 3530
Beukeboom, H. 2475
Beuker, E. 2009, 2791
Bevilacqua, L. R. 2055
Bevilacqua, M. 5732
Bevington, J. M. 9437
Bewley, J. D. 3387, 3832
Beyl, C. A. 3392, 4978
Beymer, R. J. 3049
Beyschlag, W. 456, 2878, 2948, 5405
Bezo, M. 5080
Bezzola, D. 9323, 10110
Bhaduria, S. B. S. 10087
Bhag Mal 5558
Bhagat, S. 79, 3388
Bhagwat, K. A. 5328
Bhakare, A. H. 2975
Bhakare, H. A. 2975
Bhalerao, M. M. 430
Bhandari, A. R. 882
Bhandari, D. C. 2556
Bhandari, H. C. S. 98, 103, 105, 3400
Bhandari, M. 582, 2569
Bhandari, M. M. 747
Bharat Bhushan 3361
Bharathe, K. P. S. 1578
Bharathi, R. K. 8563
Bhardwaj, C. L. 3670
Bhardwaj, L. N. 3168
Bhardwaj, S. D. 141, 546, 2572, 8597
Bhaskar, V. 2281
Bhat, M. G. 8361
Bhat, M. N. 1442, 3153
Bhatia, M. 706, 2167
Bhatnagar, N. 2556
Bhatnagar, P. 6154, 6156, 6198
Bhatt, B. P. 113, 1736
Bhatt, Y. D. 3254, 3864
Bhattacharya, A. K. 3668, 8079
Bhattacharya, G. N. 4650
Bhattacharya, P. 984
Bhattacharyya, A. 4605
Bhattacharyya, R. N. 5589
Bhawani Singh 9085
Bheemaiah, G. 8586
Bhodthipuks, J. 7728

Bhowmik, A. K. 1945, 3246, 4949
Bhuiyan, M. K. 6060, 6105, 6717
Bhumibhamon, S. 5050, 6867
Bhushan, B. 3361
Bhutta, A. R. 2257
Bi, H. 3867, 5105
Bi, H. Q. 3867, 4389, 5105, 5169, 6833
Bianchetti, R. 6499, 7179, 8104
Bianchi, M. 8725
Bianchini, J. P. 9891
Bianco, P. 9582, 9918
Biblis, E. J. 4593
Bick, U. 4167, 6207
Biddiscombe, E. F. 711
Bidgood, S. 8965
Bidini, D. 303
Bie, S. W. 7626
Biesinger, M. C. 5006
Biget, J. P. 6932
Biggelaar, C. den 10105
Biging, G. S. 7675
Bignell, C. M. 2973, 3747, 8076
Bigot, C. 5012
Bigras, F. J. 786, 4477
Bigsby, H. 7705
Bigsby, H. R. 5856
Bih, F. Y. 440
Biles, F. E. 7107
Bilger, I. 5429
Bilger, W. 2878, 8496
Bilisics, L. 6486-6487, 8925-8926
Bille, J. C. 1868
Bille-Hansen, J. 8000
Billès, G. 4464
Billett, M. F. 1904
Billington, H. L. 4476
Billore, S. K. 7932
Billow, C. 1281, 1344
Bills, G. F. 9067
Bills, S. N. 9078
Binarova, P. 5945
Binazzi, A. 630, 9142-9143
Binder, F. 9463
Binder, W. D. 6079
Binkley, C. S. 1961, 2715-2716, 4457, 8546
Binkley, D. 2814, 9730
Binnie, J. 4563
Binnie, S. C. 3565
Binot, J. M. 6814
Biondi, F. 1840, 2442
BioScience 4953
Bir, R. E. 2589
Birch, K. R. 2626
Birch, T. W. 3351
Bird, T. 6190
Birdsey, R. A. 2731, 3630
Birgelis, J. J. 7342
Birgelis, Ya. Ya. 7342, 7347
Birgersson, G. 2348, 6451
Birk, E. M. 6183
Birks, H. J. B. 2137
Birks, J. S. 557, 1425
Birol, F. 3686
Biron, P. 5279
Birse, E. L. 1359
Biryukov, V. I. 65
Bishat, R. P. 2037
Bishop, K. 7648, 8795, 8814
Bishop, K. H. 6339
Bisht, N. S. 429, 10092
Bisht, R. P. 1661, 9050
Bisht, R. S. 2371
Bisla, S. S. 7319
Bissegger, M. 5617, 7854
Bisseling, T. 8264
Bisset, N. G. 422
Bist, H. S. 95
Biswas, A. K. 388
Biswas, B. K. 5097
Biswas, S. 515, 2021, 7601
Bitter, A. W. 9616
Biurrun, I. 4772
Björkman, C. 10032
Björkman, L. 6919
Black, C. R. 1597
Black, K. E. 10000
Black, R. J. 1733
Black, T. A. 3447, 3534
Blackburn, D. G. 880
Blackburn, G. A. 6224
Blackett, H. L. 2735-2749
Blackstock, T. H. 7297
Blackwell, B. 8880
Blada, I. 2186, 5490, 9040
Blair, J. M. 1924
Blais, D. 6795
Blais, R. 6815
Blaise, F. 9356
Blake, J. G. 4923-4924
Blake, L. 7683
Blake, R. W. 8416
Blake, T. J. 1273, 2845, 3018, 5477, 7195
Blakeway, F. C. 90
Blakey, J. K. 2960
Blanc, R. M. le 3779
Blanchard, J. 9490
Blanchard, R. D. 2063
Blanchette, R. A. 9094
Blanck, K. 3632, 3664, 5241, 5323
Blanco, A. 6071
Blanco, B. 1923
Blanco Pavéz, R. 6168
Blandon, D. M. Z. 7046
Blanken, P. D. 3693, 7948
Blaschke, H. 8292
Blasco, S. 2393
Blasi, C. 6256
Blasing, T. J. 5915
Blatner, K. A. 53, 5165, 8542
Blazich, F. A. 881, 6144
Blazkova, S. 5831
Blenis, P. V. 5623, 8116
Bleuten, W. 6345
Blew, R. D. 8825
Blicher-Mathiesen, U. 2974
Bliss, J. C. 1645, 3502
Bliss, L. C. 3321
Block, M. A. 6472
Block, R. 5339
Block, W. M. 4183, 4901
Blockhus, J. M. 2425
Blois, P. de 1401
Blokhin, A. V. 9852
Blom, C. W. P. M. 9963
Blomgren, M. 8259
Blood, E. R. 1069
Bloom, C. A. 36
Bloom, N. S. 3678
Blot, J. 7295
Blum, W. E. H. 7886
Blumwald, E. 1273, 2845, 5234, 6476, 9850
Blyth, C. B. 7268
Boa, E. R. 5566
Boatman, N. D. 7643
Bobbe, T. 6237
Bobek, B. 4913
Bobiec, A. 7050, 7284
Bobowicz, M. A. 7349-7350
Bocco, A. 6516
Bock, F. de 1936
Bock, K. 9498
Bock, M. 8496
Boddy, L. 4861, 8766, 9713
Bode, M. 7889
Bodmer, R. E. 685, 5812
Bodson, M. 431
Boecklen, W. J. 5719
Boer, B. 728
Boer, P. J. den 1519
Boerner, R. E. J. 1709, 3619, 6344
Boettner, C. W. 9160
Bogacheva, I. A. 2351, 8336
Bogatyrev, L. G. 1952, 7916
Bogdanov, Ė. N. 4944
Bogenrieder, A. 9935
Boggs, J. A. 4340
Bognar, J. A. 3510, 7280
Bognetteau-Verlinden, E. 1547
Bogusz, D. 9994
Bohlin, E. 3068
Bohlman, S. A. 6276
Bohm, B. A. 8091
Böhm, J. P. 4721
Böhm, M. 8835
Bohra, N. K. 131
Bohren, L. 4953
Boily, J. 9491
Bois et Forêts des Tropiques 9410-9411
Boisaubert, B. 1512
Boisseau, T. 3567
Boland, D. J. 3136, 3993, 8186
Bole, D. 2613
Bolea, V. 8604
Bolhàr-Nordenkampf, H. 5103
Bolhàr-Nordenkampf, H. R. 468, 7197
Boll, M. 110, 867, 6885
Bolle, C. 3973
Bollig, J. J. 4345, 9512
Bollinger, E. K. 9214
Bolognini, G. 1353
Bolon, N. A. 5214
Bolondinskiĭ, V. K. 2886, 5946, 9751
Bołvanský, M. 7212
Bølviken, B. 9692
Bolzani, V. da S. 8086
Bombardelli, E. 9800
Bombosch, S. 3191
Bommineni, V. R. 3975
Bon, M. C. 2609
Bonaldo, A. 2055, 6421
Bonan, G. B. 799, 1029, 4768
Bončina, A. 5149
Bond, W. J. 3946
Bondesson, L. 2726, 6182
Bondi, M. C. 5150
Bondole, L. B. M. 5934
Bondrup-Nielsen, S. 9621, 9941
Bonduelle, P. 6101, 6912-6913, 8632
Bonen, L. 573
Bonga, J. M. 4275, 5079, 7359
Bongers, F. 1334, 6570
Bonhomme, M. 4732
Boni, C. 6158
Bonilla, D. 5249
Bonnaire, P. 6249
Bonneau, M. 890, 2610, 2856, 3567, 3814, 3820, 7974, 8943
Bonnefille, R. 7569
Bonnefond, J. M. 4469
Bonner, F. T. 2533-2534, 3381
Bonner, L. H. 9209
Bonnet-Masimbert, M. 2103, 3797, 4151, 4672, 4698, 4732, 9428
Bonotto, A. L. 7245
Bonsen, K. J. M. 10016
Bookhout, T. A. 6686
Boone, R. 326
Boone, R. D. 5254
Boontawee, B. 8473
Boose, E. R. 2801
Booth, T. H. 2796
Bora, P. 63, 99
Boratyńska, K. 1350
Boratyński, A. 753, 1325, 1575-1576, 7243
Borchert, R. 2838, 2929, 4521, 6493
Borchmann, A. 4668
Bordelon, M. 4265
Borden, J. H. 1489-1490, 2345, 5705, 6658, 7497, 8342
Borderies, G. 4678
Borders, B. E. 6174
Borel, F. 38
Borelli, M. 1640, 6136, 6245
Borelli, S. 7325
Borgel, H. 1480
Borgella, R., Jr. 9217
Borges, J. C. 6804
Borges, R. M. 1514
Borgesius, J. J. 1062
Borghetti, M. 1929, 3607, 7069
Borgohain, M. N. 63
Borgström, R. 7626
Boring, L. R. 8182
Børja, I. 9087
Borkowska, A. 7534-7535
Borland, A. M. 4714
Bormann, B. T. 3621
Bormann, F. H. 3621, 4195
Bornman, C. H. 2601
Borowy, N. 3702
Borralho, N. M. G. 2171, 4182, 5539, 7724, 8241, 9967
Borrego, C. 3540
Borries, D. von 7922
Borsdorf, H. 305
Borse, S. S. 671
Bortenschlager, S. 6764
Bory, G. 5393
Bos, J. 4098
Bosac, C. 8755
Boscherini, G. 2060, 2194, 3974
Bosco, M. 2406, 9079
Boshier, D. H. 6597-6599, 8123
Bosman, M. T. M. 350
Bossel, H. 4215
Bossen, M. E. 2862
Bossy, A. 2792
Bost, F. 3090
Bostrack, J. M. 2044
Bosveld, F. C. 2877
Böswald, K. 1000, 1307
Boswell, R. 6501
Botch, M. 5209
Botha, D. J. 502
Bothma, J. du P. 3206
Botkin, D. B. 3481
Botta, B. 9830
Bottacci, A. 4508, 6330
Bottai, L. 8734
Bottner, G. H. 9160
Bottner, P. 3583, 4464
Botton, B. 5577, 5608, 8273
Boucaud, M. T. de 1698
Bouchard, A. 1357, 4097, 4787, 8439
Bouchard, D. 4008, 5595
Bouchemal, N. 3757
Boucher, B. A. 5016
Boucher, D. H. 547, 3438
Bouchet, M. A. 4317
Bouchon, J. 3290
Boudet, A. 4678, 7375
Boudet, A. M. 460, 1893, 4678, 7377, 9063
Boudier, B. 8286
Boudot, J. P. 4717
Bouetoukadilamio, V. 8519
Bougher, N. L. 5592, 5610
Bouhot, L. 2792
Bouhot-Delduc, L. 4038
Bouillet, J. P. 2932, 4634, 8858
Bouman, A. F. 2154
Bourgeau-Chavez, L. L. 2762
Bourgenot, L. 7693
Bourgeois, G. 3746
Bourke, L. 7703
Bourque, C. P. A. 6346, 8009, 8856
Boury, S. 8306
Bousquet, J. 54, 185, 1612, 2208, 3124, 7736, 8566, 9045
Bousquet-Melou, A. 8914
Boussim, I. J. 7414-7415
Bouten, W. 3568
Bouthillier, L. 6738
Boutin, R. 278, 9676, 9694
Boutton, T. W. 3002
Bouvarel, L. 149, 836
Bouvarel, P. 7029, 8480
Bouvet, A. 9035
Bovio, G. 370, 376, 6374
Bowden, R. 326
Bowden, R. D. 1070
Bowden, W. B. 3621
Bowdler, T. M. 6729
Bowen, G. D. 5153, 9724
Bowen, M. R. 6947
Bower, D. R. 4587
Bowers, J. E. 3030
Bowers, W. W. 5705
Bowes, G. G. 5145
Bowes, M. D. 3543
Bowker, J. M. 2473
Bowling, C. 250, 6127, 6632
Bowman, D. C. 8804
Bowman, D. M. J. S. 2005, 2144, 3087, 3113, 3935, 7081, 7256

Bowman, V. 1708
Box, E. O. 3070, 5922
Boxel, J. H. van 1401
Boxman, A. W. 2617, 3665, 5318, 5323
Boxsem, W. 1537
Boyce, R. L. 8763
Boyce, S. G. 3350, 8470
Boyd, H. P. 7420
Boyd, J. M. 10125
Boyd, M. R. 9827
Boyd, M. T. 2596
Boyd, R. S. 6124
Boyer, W. D. 4324, 5363
Boyeras, F. 6170
Boyle, K. J. 2483
Boyle, S. 2978
Boyle, T. 3124
Boyle, T. J. B. 5477, 6837, 8473, 9026, 9059
Boza, J. 437
Bozek, M. A. 4936
Bozhkov, P. V. 873, 6067
Braathe, P. 9672
Braatne, J. 8495
Braatz, S. 1588
Brabänder, H. D. 9656
Bradfield, G. E. 6544
Bradford, J. 7234
Bradley, G. A. 8472
Bradley, R. G. 9357
Bradshaw, G. A. 4132
Bradshaw, H. D., Jr. 1440, 2172, 2214, 5532, 7367
Bradshaw, R. 509, 3068, 6919
Bradshaw, R. H. W. 6800
Bradstock, R. A. 2917, 3698, 8036
Brady, N. C. 8491
Brække, F. H. 2784, 7751
Bragato, G. 987
Bragg, A. 2637
Bragg, A. L. 8395
Bragg, D. C. 8861
Brahmchari, B. N. 5525
Brahmer, G. 3412
Braithwaite, R. W. 1306
Braithwaite, W. 6713
Bråkenhielm, S. 6334, 6539
Brakke, M. P. 6654
Bramaramba, B. 102, 104
Bramble, W. C. 165
Bramlett, D. L. 9876
Bran, D. 4317
Branchi, F. 715, 6714
Brand, D. G. 248, 3491, 6324, 7793
Brand, K. 2399
Brandão, M. 2147
Brande, A. 7261
Brandel, G. 3560
Brandenburg, A. M. 8542
Brandini, P. 214
Brandl, H. 773
Brandle, J. R. 1121, 8502, 9189
Brandon, K. 5858
Brandrud, T. E. 5580
Brandstetter, A. 7886
Brandstetter, M. 9176
Brang, P. 6555
Brannon, M. P. 3195
Branzanti, B. 6606, 9077
Brasier, C. 5633
Brasier, C. M. 5634, 8295, 9103
Brasil, E. C. 2422
Brasileiro, A. C. M. 4812
Brassel, P. 6219, 6809
Bratati De 9564
Bratoeff, E. A. 1242
Braun, H. 2445
Braun, L. N. 5831
Braun, O. P. G. 3566
Braun, S. 5311, 5693, 7753
Bravo, F. 8158
Braxton, S. M. 4899
Bray, J. R. 1393
Braysher, M. 6787
Braza, R. D. 1476, 2302, 2310, 3185
Brazier, J. D. 2655
Braziotis, D. C. 8428
Brea, M. 8142
Breckle, S. W. 2955, 2976
Bréda, N. 4523, 5279, 6907, 7066, 7951-7952
Brédard, S. 8272
Bredemeier, M. 3632, 3664, 5241, 5323
Bredenkamp, B. 212, 216
Bredenkamp, B. V. 2514, 4384
Bredenkamp, C. L. 502
Bredenkamp, G. J. 5451, 8160
Breedlove, D. A. 4683
Breemen, N. van 5323, 6329, 7976, 9364
Breidenbach, R. W. 3014
Breitenbach, M. 5542
Breloer, H. 7651
Breman, H. 8466
Bren, L. J. 6370, 10086
Brenac, P. 3067
Brennan, P. 4168
Brenner, A. J. 7384, 8383
Bresnan, D. F. 834, 5059, 6096
Breteler, F. J. 9890
Breth, S. A. 7700
Brêthes, A. 1918
Breuil, C. 4669
Breuning-Madsen, H. 5351
Brewbaker, J. L. 2006, 2173
Brewer, C. A. 3723
Brewer, L. G. 6635
Briales, E. R. 6249
Bricault, P. 3915
Brice, C. E. 6236
Briceño V., A. J. 6645
Bricker, B. D. 3427
Bridgewater, F. E. 4174
Bridgewater, P. B. 3924
Bridgham, S. D. 9722
Bridgwater, F. E. 3126, 3128
Briel, J. van den 1546
Briffa, K. R. 3292
Briggs, D. G. 5214
Briggs, J. M. 5442
Briggs, R. D. 1774, 1842
Brils, C. 8471
Brimont, A. 4001, 6611
Brinker, R. 4593
Brinkman, D. 6900
Brinkman, J. A. 1709
Brion, C. 2104
Brioua, A. H. 4527
Brison, M. 1698
Brissette, J. C. 2464-2465
Brisson, J. 4787
Brito, J. L. S. 1032
Britt-Kapoor, C. 9292
Brittain, S. A. 5242-5243
Brizard, J. P. 9981
Broad, L. R. 5019
Broad, R. 9392
Broadmeadow, M. S. J. 2998, 4714
Brochet, M. 7581
Brochini, C. B. 8086
Brockett, C. D. 6852
Brockley, R. P. 887, 897, 9462
Brockwell, J. 2241
Brocque, A. F. le 7043
Broda, R. 5306
Brodbeck, B. V. 8329
Brodie, C. 6579
Brodie, J. 9119
Brodie, J. D. 1618, 1623, 3501
Broekhuizen, S. 1519
Brogi, L. 3025-3026, 4718
Brokaw, N. 6547
Brokaw, N. V. L. 1065, 1074, 1082, 1892
Bröker, F. W. 4176
Brolin, A. 8007
Brondizio, E. 4953
Brooker, M. I. H. 3856, 3859, 3861, 7619
Brookes, C. P. 5696
Brooks, D. E. 3202
Brooks, J. R. 1932, 2686, 8930
Brooks, K. N. 4149
Brooks, R. 5808
Brooks, R. T. 2693
Brooks, R. T., Jr. 1645
Brooks, S. M. 4087, 8012
Brophy, J. J. 415, 2118, 2973, 3747, 8075-8076
Brorström-Lundén, E. 8002
Bros, W. E. 7400
Broschat, T. K. 2971, 4981
Brose, P. H. 4033
Bross, E. L. 9276
Brouwer, R. 4463
Browaldh, M. 10115
Browder, J. O. 7690
Browicz, K. 753, 1325, 1328, 1351, 7221, 7243, 7262
Brown, A. D. 3690
Brown, A. G. 5941
Brown, A. H. D. 5559
Brown, B. N. 4580
Brown, C. G. 8056
Brown, C. L. 3340, 6397, 8052-8053
Brown, D. A. 2279
Brown, D. H. 8169
Brown, D. M. 9315
Brown, G. 9923
Brown, I. F. 9594
Brown, J. L. 4420
Brown, K. 8, 2449, 3341, 9649
Brown, K. J. 3657
Brown, K. M. 2536
Brown, K. W. 677
Brown, M. J. 1884, 2012, 3055, 3556, 7395
Brown, P. H. 10121
Brown, S. 3122, 5092
Brown, S. C. 4840
Brown, S. M. 1141
Brownlow, M. J. C. 3264
Brownson, D. M. 8077
Brubaker, L. B. 1995, 3289
Bruce, J. W. 4463
Bruchwald, A. 6976
Bruciamacchie, M. 916, 5124
Bruckerhoff, D. N. 4344
Bruckert, S. 1935, 5280
Bruenig, E. F. 6206
Brugnoli, A. 698
Bruhn, J. N. 1459, 2261, 9703
Bruijnzeel, L. A. 3806
Brumana, P. 6377
Brumelle, S. 238
Brumme, R. 7937
Brun, A. 5577, 8283
Brun, J. J. 1918
Brunberg, B. 5154
Brunck, F. 6647, 10030-10031
Brunda, M. 8015
Brundrett, M. 5590
Brundrett, M. C. 5607
Brunel, J. P. 3322
Brunet, Y. 4551
Brunette, V. 4172
Brunner, A. 948, 1538, 1611
Brunner, A. M. 7337
Brunner, I. 5569
Brunner, J. E. 5771
Brunori, A. 9511
Brunsfeld, S. J. 500, 5524
Brussaard, L. 5262
Bruteig, I. E. 1390
Bruzón, N. 1540
Bryan, R. B. 2398, 9238
Bryant, J. P. 4915, 4919, 6492
Bryant, R. 3128
Bryant, R. B. 7574
Bryant, R. L. 9266
Brynn, D. J. 347
Brzeziecki, B. 246, 2756, 4751, 7267, 8179
Bubenickova, L. 5831
Bubert, H. G. 9696
Bubier, J. L. 361
Bublinec, E. 7087
Bucci, G. 2199
Buccianti, M. 3465
Buchanan, J. B. 6684
Bucher, J. 2982, 5394, 7958
Bucher, J. B. 329, 4721
Buchert, G. P. 4815
Buchmann, N. 1127
Buchner, R. 9892
Buck, L. E. 10096
Bücker, J. 334, 4549
Buckeridge, M. S. 7218
Bücking, H. 5581
Bücking, W. 9954
Buckland, S. T. 2760, 5274
Buckley, D. 247
Buckley, L. G. 5085
Buckley, N. H. 669
Buckney, R. T. 7043
Büdenbender, A. 821
Budimir, S. 88
Budisantoso, H. S. 1805
Buehler, D. A. 6685
Bueno, M. A. 5487
Buffa, G. 6516
Buffington, J. M. 6698
Buffoni, A. 337
Buford, M. A. 2472
Bugmann, H. 355, 3957
Bugos, R. C. 2221
Buijtenen, J. P. van 3366
Bujang, J. S. 6427
Bujarska-Borkowska, B. 4267
Bukenhofer, G. A. 4071
Bukenya, Z. R. 7798
Bulatovic, V. 6437
Bulgannawar, G. N. 1663
Bulger, A. J. 3677
Bull, B. B. 4899
Bulloch, B. T. 3160
Bullock, S. H. 2146, 3036
Bulman, L. S. 4872
Bunce, H. W. F. 4557
Bunce, N. J. 1171
Bunce, R. G. H. 5848
Bunnell, F. 9221
Bunnell, F. L. 9220
Bunting, S. C. 2565
Bunzl, K. 8830
Burandt, C. L. 9841
Burban, L. L. 10142
Burbidge, T. 5703, 6653
Burch, P. L. 941, 3781
Burch, W. R., Jr. 1588
Burckhardt, D. 5698
Burczyk, J. 830, 1426, 3976, 8207
Burdon, J. J. 1414, 5665
Burdon, R. D. 4258, 4592, 4817-4826, 5176
Burel, F. 7555
Buresti, E. 2406, 8626, 9079
Burg, J. van den 320, 889
Burgaz, A. R. 1388
Burger, J. A. 4579
Burgers, S. L. G. E. 1972
Burgess, D. 4354, 4684, 7793
Burgess, F. F. du 5015
Burgess, N. D. 1369
Burgess, R. 3184
Burgess, T. 3155, 4006, 5579, 8275
Burghouts, T. B. A. 2823
Bürgi, M. 6842
Burgman, M. 2508, 5020
Burgman, M. A. 2504, 2509, 2978, 8726
Burk, T. E. 1035, 3338, 4216, 6826, 8936
Burkart, R. 4125
Burkart, S. 2075
Burke, I. C. 4953
Burke, M. K. 2855
Burke, W. D. 1393
Burkey, T. V. 1406
Burkhalter, R. 4161
Burkhardt, J. 2953, 8841
Burkhart, H. E. 2122, 2707, 2927, 3331, 5148, 6187
Burleigh, S. H. 4848
Burley, J. 6787
Burman, A. G. 7223
Burnham, C. 9160
Burnham, K. P. 3199
Burnham, M. 2782
Burnham, R. J. 3887
Burns, B. R. 2916
Burns, K. A. 4575-4577
Burns, K. F. 6029
Burns, T. 677
Burr, K. E. 9360

Burris, L. C. 9876
Burrows, C. J. 486-487, 3826
Burrows, D. W. 6933
Burrows, G. E. 2935
Burrows, L. E. 3909, 4499
Burrows, N. D. 8463
Burschel, P. 1538, 7130
Burslem, D. F. R. P. 4543, 6580
Burt, R. J. 10062
Burton, A. J. 5172
Burton, P. J. 1814, 3500, 4270, 4794, 6080
Burton, R. 346
Burzyński, G. 25
Burzyński, J. 899
Busby, R. L. 1873
Buscarini, T. 5139
Busch, D. E. 1108, 9018
Buschbacher, R. J. 1012
Buschena, C. A. 4841
Buscot, F. 597, 8784
Buse, L. 2634
Buse, L. J. 4331
Bush, J. K. 9013
Bush, M. B. 4761
Busing, R. T. 2166, 3101, 4810
Buskirk, S. W. 6783
Buso, D. C. 319
Busse, M. D. 2826
Bussotti, F. 3025-3026, 4718, 8837
Bustos, C. 1236
Butcher, P. A. 2220, 5564
Butcher, T. B. 7717, 8196
Butin, H. 5726
Butin, H. H. 8467
Butler, A. 7903
Butler, D. R. 3894
Butler, T. J. 7101
Butorac, B. 534
Butterfield, B. 9298
Butterfield, B. G. 1604
Butterfield, R. P. 2558, 4262, 9423
Butterworth, E. W. 2319
Büttner, G. 9698, 9766
Büttner, V. 4661
Buttoud, G. 5886, 7111
Buturović-Derić, Z. 8582
Byazrov, L. G. 7306
Bycroft, C. M. 3076
Byers, J. A. 2348
Byers, J. N. 4693
Byington, T. S. 8331
Bykadorov, A. V. 7993
Bykov, A. V. 4962
Byler, K. G. 1250
Bylund, H. 5714
Byrne, M. 2213, 5526, 5564
Byrne, M. M. 5676
Byrnes, W. R. 165, 9539
Byron, N. 728
Byron, Y. 759, 7640
Bytnerowicz, A. 332, 1153, 7655, 7986, 8845
Byun, J. K. 8849
Byun, S. Y. 9567
Caballero Deloya, M. 1588
Caballero R.,. M. 1444
Cabané, M. 1893
Cabarle, B. 1013
Cabido, M. 2148, 3914, 3929
Caboun, V. 7320
Cabral, J. A. 9819
Cabral, M. T. 7140
Cabral, O. M. R. 3736
Cabrera, M. 1496
Cabrera Cano, E. 1081
Cabrera Pérez, M. A. 6032
Caccavari, M. A. 393
Cadahia, C. 10153
Cadisch, G. 1939
Cadman, A. 9409
Cadogan, B. L. 676, 7503
Caffa, P. 9636
Cahill, J. M. 5214
Caicco, S. L. 9298
Cailliez, F. 5885, 9400
Cain, M. D. 1747, 1769, 4355, 7304
Cairney, J. W. G. 5597
Cairns, D. M. 3894
Cairns, J., Jr. 4094
Cairns, K. G. 2436
Calabrese, G. 9899
Calamari, D. 1978
Calamini, G. 3468
Calcote, R. 8992
Calder, I. R. 702, 8870
Calderón, O. 5458
Calderón, S. 3464
Calderoni, G. 7031
Caldo, L. del 5341
Caldwell, B. A. 4497
Caldwell, J. M. 6123
Caldwell, M. M. 6257
Calì, A. 303
Cali, I. H. del 2750
Cali, P. F. 7196
Calistri, I. 3026
Callan, B. E. 8308
Callaway, R. M. 1878, 3112, 3552, 4406
Calley, M. 1306
Calmé, S. 786, 4477
Calmon, J. P. 2382
Calogirou, A. 8865
Calvert, G. M. 7203
Calvet, J. C. 1032
Calvin, C. L. 6641
Calvo, E. 6138
Calvo, J. C. 8355
Calvo, J. M. 8368
Calvo, L. 8158
Calzadilla, E. 1086, 1556
Camargo, P. B. de 4380
Camer-Pesci, P. 662
Camero Rey, L. A. 10109
Cameron, A. D. 410, 9519
Cameron, B. G. 8903
Cameron, G. N. 2696
Cameron, P. J. 679
Cameron, R. A. D. 2368
Cameron, R. S. 4045
Cameroon, Projet ONADEF/ODA de Mbalmayo 1216
Camia, A. 6374
Camiré, C. 251, 4666, 5291, 7972, 8566
Camm, E. L. 4310, 6080, 7062
Cammell, M. E. 2307
Campadelli, G. 1492
Campargue, C. 4678
Campbell, A. G. 7764
Campbell, B. M. 195, 2812, 4802, 6369, 6549, 8156
Campbell, C. 7268
Campbell, C. D. 5274
Campbell, D. G. 684
Campbell, D. L. 9228
Campbell, E. J. F. 2823
Campbell, I. C. 7896
Campbell, I. D. 2124, 7268
Campbell, M. A. 3981
Campbell, M. M. 4678
Campbell, R. K. 4654
Campbell, W. H. 2221
Campo, E. van 2125
Campos Diaz, J. L. 6534
Camussi, A. 2191
Canada, Canadian Council of Forest Ministers 8476
Canada, Canadian Institute of Forestry 4171
Canada, Forest Insect and Disease Survey 8543
Canada, Forestry Canada, Fire Danger Group 8877
Canada, Forestry Research Advisory Council 52
Canada, University of Toronto, Faculty of Forestry and School of Continuing Studies 1605
Canadian Journal of Botany 7639
Canala-Echeverría V., J. L. 1435
Candau, P. 3069
Candia, R. J. 1383
Cane, J. H. 1316
Cañellas, I. 7775
Canger, S. 8187
Canham, C. D. 1520, 3904, 5181, 5811, 7308, 7310, 7328
Canini, A. 4842
Cannata, F. 9271
Cannell, M. G. R. 2633, 4315, 8429, 9357
Cannell, R. J. 2647
Cannon, C. H. 1738
Cannon, P. G. 3971, 8188
Canny, M. J. 7065
Cánovas, F. M. 5505
Cant, M. S. 5129
Cantiani, M. 2685
Cantiani, M. G. 2685, 6093
Cantiani, P. 6093, 6715
Cantón, F. R. 5505
Cantore, V. 4935
Canut, H. 5953
Cao, M. 9006
Cao, Q. V. 3456
Cao, X. 6192
Cao, Z. X. 485
Capaccioli, A. 1517
Cape, J. N. 2450, 2887, 3629, 4563
Čapek, M. 7636
Capell, S. S. 6644
Capellano, A. 599
Capelo, J. 7133
Capelo, J. H. 7289
Capels, K. M. 2385
Cappellato, R. 8374
Cappelli, M. 8839
Cappiello, P. E. 138
Cappuccino, N. 5716
Capuana, M. 4290, 6057
Caputa, A. 9503
Caquelard, T. 9038
Carabelli, F. A. 5171, 5943
Caraglio, Y. 6387
Caramiello, R. 6516
Carauta, J. P. P. 9895, 9907
Carçani, P. 9377
Carceller, F. 7902
Cárdaba, B. 7177
Cardellina, J. H., II 9827
Cardemil, L. 2989, 3798, 8100
Cárdenas, A. 1107
Cardoso, C. 2147
Cardoso de Freitas, L. H. 8074
Cardozo López, A. 1326
Carey, A. B. 7517
Carey, E. V. 3122
Carey, P. D. 6393
Carey, W. A. 4025, 8831
Carignan, R. 7891
Carino, H. 4593
Carisey, N. 4882, 7648
Caritat, A. 1825
Carleton, T. J. 4788
Carletti, G. 1445
Carli, C. 668
Carli, S. 5089
Carlquist, S. 2023, 3722, 8073
Carlson, A. 6690
Carlson, C. A. 2092, 4846
Carlson, C. E. 1432
Carlson, C. L. 2092
Carlson, J. A. 5736
Carlson, J. E. 4827, 6473
Carlson, M. 1752
Carlsson, D. 2726
Carlyle, E. E. 5892
Carlyle, J. C. 4489
Carmean, W. H. 8702
Carmen, W. J. 4190, 4733
Carmen Pérez, M. del 1321
Carmo, A. P. T. do 9898
Carmona Valdovinos, T. F. 1211
Carnegie, A. J. 4869
Caron, C. 2579
Caron, G. É. 4269, 5423, 9347
Caroppo, S. 9182
Carpenter, R. J. 4651
Carpenter, S. E. 4497
Carpenter, T. A. 5011
Carranza, C. 4951
Carranza, L. 3929
Carranza, M. L. 2148
Carrer, M. 6566
Carreras, J. 5449
Carretero Carrero, M. P. 8785
Carrier, B. D. 5140
Carrière, M. 2446
Carriero, A. 8740
Carrillo Parra, A. 241
Carroll, A. L. 5722
Carroll, E. R. 5540
Carroll, G. C. 5656
Carroll, J. J. 7102
Carroll, M. S. 4425, 8542
Carsey, K. S. 3708
Carson, C. F. 206
Carson, M. J. 3710
Carter, A. S. 2604
Carter, D. R. 6605
Carter, E. 8031
Carter, G. A. 1109, 2769, 9749
Carter, J. 8529
Carter, J. L. 5720-5721
Carter, M. 1052
Carter, M. C. 5493
Carter, M. R. 2324, 5721
Carter, R. E. 4321, 8776
Caruso, C. 1638, 9375
Carvalho, A. G. de 2364
Carvalho, C. E. V. 1092
Carvalho, C. R. de 4085
Carvalho, D. A. 1367
Carvalho, G. A. 6643
Carvalho, J. A., Jr. 9776
Carvalho, J. O. P. de 6180
Carvalho, P. E. R. 9319
Carvalho, R. G. da S. 2147
Carvill, K. M. 2535
Cary, G. J. 7138
Casa, R. 6701
Casabianca, F. 5869
Casadelvalle, I. 1107
Casado, H. 1166, 1948, 3671
Casal, M. 9774
Casals, P. 7889
Casanova, J. B. 7525
Casanova, P. 1517
Casanovas, J. G. 8371
Casar, I. 4529
Casati, D. 8526
Case, R. M. 9189
Case, T. J. 2362
Casenave, J. L. de 7271
Cashman, J. 7677
Casini, N. 4021, 5626, 6020, 9106
Casper, B. B. 4478
Cassel, D. K. 6251, 8491
Cassells, D. 7593
Cassier, P. 3186, 5757
Castagnoli, M. 668
Castañeda, E. 7713
Castanheira Diniz, A. 9909
Castanheira Diniz, A. C. 9908
Castaños, L. J. 2776
Castell, C. 1937, 3793, 8753
Castellani, C. 6208
Castellano, M. 7190
Castello, J. D. 614
Castéra, P. 4586
Castien, E. 10060
Castilleja, G. 3354
Castillo, C. A. del 8857
Castillo, F. J. 1948
Castillo, S. 6736
Castillo Morales, I. 1211
Castro, F. de 1179
Castro, G. 6604
Castro, M. S. 1070, 4503
Castro, O. 9814, 9828
Catalán, L. 4951
Catalán, L. A. 72, 4951
Catalano, G. L. 1319, 8948, 9884
Catalano, S. 5436
Catarino, F. M. 4514, 5367
Cates, R. C. 5826
Cates, R. G. 5718, 6675, 8093
Catesson, A. M. 1233, 3757
Catinot, R. 8600
Catling, P. C. 7134, 10062
Catt, D. C. 688

Cattelino, P. J. 4208
Causey, M. K. 4053
Causin, R. 2268
Cauvin, B. 6101, 9053
Cavailhes, J. 1544
Cavaleiro, J. A. S. 3746
Cavalheiro, A. J. 8912
Cavalli, R. 6007, 7796
Cavayas, F. 8739
Cavelier, J. 1408, 2999, 3614, 5283, 6302
Cavey, J. F. 2343
Caviglia, A. M. 3470
Čavlović, J. 4319
Cecchi, G. 1037-1038
Cecconi, S. 2889
Ceccotti, A. 280
Cedeño, A. 4044
Cejchan, S. 4167
Celada, C. 6693
Celeghini, M. 703
Celestino, C. 8588
Cellier, G. A. 48
Cenci, C. A. 6609
Cenni, E. 3026, 4718, 5951
Center for International Forestry Research 5996, 7640
Cepero Varela, E. E. 4078
Cepleanu, F. 200
Cerato, M. 10084
Cerda V., I. 2525
Cerezke, H. F. 7467
Cerff, R. 5416
Cerignoni, J. A. 2326
Cerling, T. E. 5225
Čermák, J. 1932, 2831, 7061
Černušáková, D. 521, 3932
Cerović, S. 2109
Cerrano-Moreira, A. F. 5728
Cerri, C. C. 8826
Cervigni, R. 9649
Cervinka, V. 5866, 10112
Cesar, J. 1598-1600
Césari, S. 8142
Cescatti, A. 4043
Cespedes, S. E. 6248
Cetin, H. 260
Ceulemans, R. 1606, 1932, 2800, 3713, 4213, 4401, 8112
Cevallos-Ferriz, S. R. S. 511, 2022
Cha, B. 10022
Cha, S. H. 5265
Chaba, B. 5116
Chabard, J. L. 6437
Chacalo, A. 4982
Chacon, P. 5269, 5357
Chadhar, S. K. 6019
Chadwick, D. J. 748
Chadwick, O. A. 5360
Chae, S. H. 1813
Chafe, S. C. 351
Chai, X. S. 2358
Chai, X. W. 4259
Chai, X. Z. 8786
Chaillou, S. 2587
Chaisurisri, K. 3028, 3982, 4266
Chaitanya, K. S. K. 3009
Chakrabarti, C. 6905
Chakrabarti, K. 3642
Chakrabarti, S. 632, 2313
Chakrabarty, T. 7240
Chakraborty, A. K. 2572
Chakraborty, N. 8676
Chakravarti, V. 865, 9790
Chakravarty, G. N. 556
Chakravarty, P. 8300
Chalchat, J. C. 6437, 8917
Chalmers, K. J. 5528
Chaloner, W. G. 3538
Chalot, M. 8273, 8283
Chalot, P. M. 5577
Chalupa, V. 4279
Chałupka, W. 841, 1132, 1317
Chamberlain, J. L. 3271
Chamberland, H. 7160
Chambers, D. P. 7137
Chambers, F. M. 8145
Chambers, J. L. 1887, 5402
Chamel, A. 7788
Chamshama, S. A. O. 5058, 7576
Chan, H. T. 472
Chan, S. S. 7190
Chand, P. K. 6042
Chand, S. 2786
Chandelier, P. 1460
Chander, K. 5264
Chander Shekhar 8982
Chandler, P. 7572
Chandler, S. K. 6685
Chandra, A. 155, 9418
Chandra, B. K. J. 1672, 3370
Chandra, J. P. 62
Chandra, S. 6141
Chandrashekara, U. M. 4785, 7309
Chaney, W. R. 4683, 6360, 9539
Chang, C. J. 208, 2496
Chang, K. T. 8366
Chang, M. 5349
Chang, M. T. 5349
Chang, P. L. 3492
Chang, W. C. 7805
Chanson, B. 4584, 5375
Chantaranothai, P. 8972
Chanway, C. P. 2046, 6085, 7926, 9514
Chaouche, K. 9060
Chapa, D. R. 6948
Chapajong, T. N. 3458
Chapela, I. H. 5664
Chapin, F. S., III 1931, 2853, 3095, 4517, 4768, 9721
Chapman, A. 7706
Chapman, C. A. 2489, 8953
Chapman, J. D. 6383
Chapman, J. W. 3118, 4503
Chapman, L. J. 2489, 8953
Chapman, N. 10073
Chapman, T. J. 9365
Chapola, G. B. J. 4192
Chappelka, A. H. 1154
Chappell, H. N. 1903, 3418, 8794
Chappill, J. A. 496
Chapuis, P. J. 812
Charest, P. J. 573, 4275, 6591
Charlebois, D. 1156
Charley, J. L. 2817
Charon, J. 8928
Charron, D. 4789
Chase, M. R. 3139, 6597-6599
Chase, R. 375, 2001
Chastagner, G. A. 4871, 5659, 8308, 9097
Chatrou, L. 6570
Chatterjee, B. N. 3272
Chatterjee, N. 8437
Chattopadhyay, S. K. 9806, 9809
Chaturvedi, A. N. 577, 933, 2788, 4975, 5984
Chaturvedi, O. P. 1664, 2416
Chaturvedi, S. 1217
Chatziphilippidis, G. 8618
Chaubey, A. K. 1901
Chauchard, L. M. 5171
Chaudhary, A. H. 3150
Chaudhary, R. G. 5558
Chaudhry, M. A. 6389
Chaudhuri, S. 284
Chauhan, L. 4673, 8135, 9789
Chauhan, N. S. 1040
Chauhan, P. S. 95
Chaukiyal, S. P. 6147
Chauret, G. 6364
Chaussod, R. 3146-3147
Chauvel, A. 1899
Chauvet, E. 7917
Chauvière, M. 3404
Chauvin, C. 9928, 10090
Chavan, A. S. 8023
Chavan, K. N. 8023
Chaves, M. M. 1890
Chavez, J. P. 9839
Chavez, V. M. 5101, 7748
Chayamarit, K. 3862
Cheddadi, R. 2125
Chee, P. P. 7738
Cheeseman, J. M. 2846
Chege, F. 6738
Cheliak, W. M. 1612, 2208
Chemeris, M. V. 5332
Chemistry and Industry of Forest Products 5163
Chen, C. M. 8508, 9036
Chen, D. M. 6895
Chen, G. R. 2400
Chen, I. S. 9821
Chen, J. 2793, 3459, 5347
Chen, J. L. 8018
Chen, J. Q. 1333
Chen, L. J. 8922, 9036
Chen, M. C. 8505
Chen, M. H. 2563
Chen, P. Z. 10026
Chen, S. C. 4540, 9671
Chen, S. G. 3713, 4213
Chen, S. S. 4539
Chen, T. 4669
Chen, T. H. H. 5534
Chen, W. M. 8080
Chen, X. Q. 5931
Chen, X. Z. 5775
Chen, Y. 5257
Chen, Y. S. 2028, 6395, 7122
Chen, Z. D. 2054
Chenevard, D. 5069
Cheng, A. S. 2530
Cheng, C. M. 8922
Cheng, S. L. 3988
Cheng, Y. S. 8910
Cheng, Z. M. 8584
Chénieux, J. C. 2579
Cheong, Y. H. 8878
Cherkinskiĭ, A. E. 3891
Chern, J. H. 8066
Chernobrovkina, N. P. 3409, 4306
Chernodubov, A. I. 5486, 8199, 8918
Cherrier, J. F. 4168, 9128
Cherrill, A. 8735
Cherry, M. L. 64
Cherubini, M. 1437
Cherubini, P. 4760
Cheswick, E. E. 7737
Chevallier, M. H. 9981
Chevone, B. I. 2888
Chevrier, N. 5135, 5289
Chew, P. T. 3873
Chézeaux, É. 9495
Chhabra, S. C. 2676
Chheteri, R. B. 6742
Chhetri, H. B. 9933
Chhimwal, C. B. 66
Chia, F. R. 7804
Chiang, F. 7244
Chiang, H. C. 9837, 9840
Chiang, V. L. 2221, 5560
Chiapella, M. 6006
Chiarabaglio, P. M. 6135-6136
Chiarucci, A. 3838
Chiba, F. 3393
Chiba, H. 9019
Chiba, K. 1943
Chiba, Y. 1820, 4479
Chibisov, G. A. 4237, 9527
Chidumayo, E. N. 5239, 6308
Chien, C. T. 3379
Chifu, T. 3926
Chikaarashi, H. 7550
Chikki, H. 3293
Chilcote, C. A. 645
Child, G. S. 7512
Chile, Comité Nacional de Sanidad Forestal 1501
Chile, Corporación Nacional Forestal 1501
Chile, Departamento Técnico de CONAF IV Región. 940
Chilima, C. Z. 6649, 8350
Chilimov, A. I. 9408
Chilvers, G. A. 1414, 6615
Chimal H., A. 1589
Chinea, J. D. 3049
Ching, N. P. 8400
Chinh, N. N. 7604
Chinn, E. 5513
Chinnathurai, A. K. 283, 8563
Chinnock, R. J. 4264
Chirwa, A. 8870
Chirwa, P. W. 6649
Chischilly, S. 6590
Chittaranjan, S. 2395
Chiu, C. 6395, 7122
Chiu, C. H. 8462
Chiu, C. Y. 4539
Chmielarz, P. 856, 6874
Cho, H. J. 9311-9312
Cho, J. H. 8709-8710
Cho, R. M. 9978
Choi, K. 9240
Choi, K. S. 9163
Choi, S. H. 9302
Choi, W. Y. 8206
Choi-Pheng, Y. 8296
Choinski, J. S., Jr. 4026
Chojnacki, B. 1441, 7382
Chojnacky, D. C. 4381
Chokkanapitak, J. 5035
Choldumrongkul, S. 1775, 9135
Choleva, B. 9181
Chollet, F. 9653
Chome, V. A. 3256
Chomentowski, W. H. 4953
Chong, C. 6041
Chong, D. K. X. 595, 5523
Chong, K. X. 5553
Chong, S. K. 8748
Choo, G. C. 8834, 9709-9710
Choo, Y. K. 1622
Choong, E. T. 3346
Choong, M. F. 1230, 8049
Chorover, J. 2918
Chota I., J. 4742
Chou, C. H. 4539
Chou, C. K. S. 5638
Choudhuri, P. K. R. 3225
Choudhury, P. C. 7802
Choudhury, S. N. 6438
Choukchou-Braham, N. 1235
Choularton, T. W. 333, 7987
Chovanec, D. 1180
Chow, C. H. 3127
Chow, P. 8919
Chowdappa, P. 3628
Chriqui, D. 5092
Christ, E. 433
Christen, P. 8916
Christensen, B. T. 289
Christensen, N. A. 2428
Christensen, N. L., Jr. 1858, 2762, 4450, 6227, 7275
Christensen, P. 5194
Christiansen, E. 10015
Christianson, L. 7484
Christie, J. M. 4416, 6943
Christophel, D. C. 6769
Christopher, P. J. 1683
Chu, G. L. 3852
Chuah, H. T. 4442
Chuang, C. H. 8066
Chubbs, T. E. 687
Chueva, T. A. 1954, 7979
Chun, S. H. 8239
Chung, C. S. 10133
Chung, P. 8237, 8302
Chung, R. C. K. 7158
Chung, Y. G. 8727-8728
Chung, Y. J. 397
Chung, Y. L. 4835
Chung G., P. 6028
Chung Guin-Po, P. 1435
Chupeau, M. C. 92
Chupeau, Y. 92
Chuprov, N. P. 4415
Churack, P. L. 4983
Church, R. 5020
Church, R. M. 1950
Churchill, H. 723
Chuvieco, E. 3696
Chylarecki, H. 827
Ciancio, O. 805, 3430, 4378, 6201, 7832, 8611, 9571
Cicák, A. 7145
Ciccarese, L. 8596
Cienciala, E. 2831, 7061, 8811-8812, 9345
Ciesla, W. M. 1300, 2312, 5418
Cihlar, J. 1861

Cilliers, A. J. 603
Cimperšek, M. 2717
Cinco, M. 1649
Cioni, P. L. 5436
Cirelli, M. T. 3354
Cissé, M. I. 7148
Čížková, R. 462
Claassen, H. C. 7124
Claassens, A. S. 8391
Clair-Maczulajtys, D. 5393
Clancy, K. M. 9152
Clapham, D. 3133, 8231
Clapham, D. H. 5502
Clardy, J. 3144
Clarholm, M. 893
Claridge, M. F. 5690
Clark, A. 51
Clark, A., III 995, 4587
Clark, B. J. 2537
Clark, C. S. 6497
Clark, D. A. 1409, 1841, 8929
Clark, D. B. 1409, 1841, 5350
Clark, D. L. 3056
Clark, G. M. 4124
Clark, J. 778
Clark, J. M. 7728
Clark, J. S. 3701, 9022
Clark, K. L. 7449
Clark, P. D. 5980
Clark, P. D. P. 9373
Clark, S. D. 309
Clarke, A. K. 5516
Clarke, G. C. 3840
Clarke, G. P. 1369
Clarke, H. R. 3224
Clarke, H. R. G. 2214
Clarke, J. 7627
Clarke, P. J. 3041, 3704, 3883
Clarke, S. R. 7438
Clarkson, D. A. 7521
Clarkson, J. R. 2118
Clary, J. K. 9105
Clason, T. R. 1765, 1780, 4320, 9274
Clastre, M. 4678
Claudot, A. C. 443
Clausen, J. C. 347
Claustres, J. P. 7654
Clavijo A., J. 5732
Clawson, R. G. 2891
Clay, D. V. 2644-2645
Clay, H. A. 3012, 3390
Cleaves, D. A. 5987
Cleef, A. M. 3080, 3921, 5448
Clegg, S. 7919
Clein, J. S. 6318
Clemensson-Lindell, A. 1885, 5319, 7750, 9460, 9788
Clement, B. 1186
Clement, C. R. 2250
Clement, D. L. 4876
Clément, F. 8535
Clement, G. L. 5704
Clement, V. 283
Clements, K. 9217
Clerivet, A. 2275
Cleve, B. van 1251, 1279, 2987
Cleve, J. R. van 4437
Cleveland, B. 4093, 5849, 5909
Cleyet-Marel, J. C. 5576
Clinebell, R. R., II 5447
Clinton, B. D. 8182
Clinton, P. W. 1568-1569
Cloney, E. E. 248
Clough, B. F. 434
Cloutier, C. 1486, 5764
Cluff, D. 7687
Cluzeau, C. 6186, 9585
Coady, N. R. 6696
Coakley, C. W. 5721
Coaloa, D. 6135-6136
Coates, D. J. 3825
Coates, K. D. 163
Coates-Estrada, R. 9205
Çobanoğlu, S. 7435, 9193
Cobben, P. L. W. 2617
Cobbina, J. 2672, 6730, 8421
Cobbinah, J. R. 4993, 5420, 6059, 6444, 10036
Cochard, H. 4511, 4523, 4621
Cocheteau, J. C. 10089
Cochran, K. D. 4308
Coderre, D. 5275
Codipietro, G. 8942
Coe, H. 7987
Coe, M. T. 507
Coelho, I. S. 9257
Coetzee, J. 7824
Coetzee, J. P. 8160
Cofinas, M. 7014
Coggeshall, M. V. 6602
Cogliastro, A. 917, 8439
Cohen, D. L. 5785
Cohen, W. B. 6223
Cohen, Y. 3214, 6304, 7947
Cohn, E. V. J. 10149
Cointat, M. 2433
Coinu, G. 4293
Cojocaru, M. 6629
Coke, J. E. 7737
Colbert, J. J. 35, 2321
Colclough, M. L. 9850
Coldea, G. 3926
Cole, D. N. 5901-5902
Cole, D. W. 894, 896, 3577, 7924
Cole, E. C. 2650-2651, 5143
Cole, F. R. 7527
Cole, J. C. 4309
Cole, W. G. 2692
Coleman, D. C. 7929
Coleman, G. D. 5534
Coleman, J. R. 1273
Coleman, M. C. 526
Coleman, S. J. 1318, 9870
Coleman, S. S. 2471
Colenutt, M. E. 10162
Coley, P. D. 315
Colgan, P. W. 3205
Colin, F. 8778, 8863
Colin, G. 1740
Colin-Belgrand, M. 7074
Colinas, C. 3156, 3589
Colinvaux, P. A. 4761
Collard, L. G. 4311
Collas, P. 9604
Collen, P. 5252
Collet, C. 4689
Collett, N. G. 6376, 6664
Colletti, J. P. 3258, 8406, 8485, 9273
Colley, D. M. 7314
Collin, G. 2972
Collin, P. 3711, 6065
Collins, B. G. 3825
Collins, C. M. 5342
Collins, H. P. 7642
Collins, J. B. 4444, 4446
Collins, J. F. 3664
Collins, M. D. 8266
Collins, M. J. B. 9261
Collins, P. T. 4924
Colmenares, F. 5122, 6711
Colombo, M. 2369
Colombo, S. J. 2803, 5234, 6476, 9338, 9850
Colombo, U. 40
Colonna, J. P. 2236
Colpi, C. 8839
Colquhoun, I. J. 7661
Colwell, R. K. 10051
Coman, B. 6787
Comba, D. R. 9186
Comeau, P. 9596
Comerford, N. B. 2860, 5301
Comia, R. A. 5873
Comins, H. N. 1057, 2697, 7139
Comiskey, J. A. 7685
Commonwealth Forestry Conference 19
Comöe, L. 2579
Comparini, C. 2269
Compere, R. 4960
Comploj, M. 1886
Comps, B. 581, 4638, 4730, 5519
Compton, J. E. 3577
Compton, J. L. 4101
Compton, S. G. 620, 3037
Comstock, J. P. 8805
Conard, S. G. 380
Conde, J. 6442
Conde, J. E. 518
Condit, R. 3507
Condon, B. 9219
Conese, C. 8734
Conklin, N. L. 970
Conley, M. E. 8939
Connell, P. 6999
Connell, S. W. 2101
Connelly, S. 5055-5056, 8529
Conner, R. N. 4070, 6680, 9209
Conner, W. H. 6293, 6963
Connery, J. H. 7539
Connet, M. B. 5503
Connolly, J. D. 9808, 9816
Connolly, J. H. 9715
Connor, K. F. 4647
Connors, J. F. 4938
Conquest, L. L. 1416
Conrad, J. M. 3280
Conroy, J. P. 269
Constantin, É. 2654
Constantin, R. J. 2375
Constantinides, M. 6817
Constantino, L. 5219
Constantino, L. F. 4372
Contés B., R. del P. 1444
Contreras, J. L. 8961
Convert, M. 3763
Conway, T. 3670
Cook, B. A. 1639
Cook, C. 5065
Cook, C. A. 9190
Cook, C. M. 6331
Cook, E. A. 6240
Cook, E. R. 2138, 2440
Cook, G. D. 2003
Cook, J. 6364
Cooks, R. G. 2496
Cool, L. G. 8087
Coolbear, P. 7641
Cooll, L. G. 4738
Cooper, D. I. 1028
Cooper, D. J. 3230
Cooper, J. 3837
Cooper, R. J. 673, 4462
Cooperrider, A. Y. 7631
Coops, H. 5842, 9963
Coosemans, N. 9034
Cooter, E. J. 2507
Copes, D. L. 1455, 4265
Copland, J. W. 4181
Coppedge, B. R. 8341
Coppin, P. 8722, 8733
Coppin, P. R. 7005
Coppock, D. L. 2670
Corbett, C. M. 4316
Cordell, C. E. 5057, 6927
Cordey, R. A. 3519
Córdova Guerra, N. 6578
Cordray, S. 8399
Corea, E. A. 9985
Coret, J. 7788
Corlett, R. T. 3873, 10133
Cormier, D. 6140, 7771
Cornara, L. 8062
Cornejo, F. H. 1916
Cornejo Valverde, F. 6286
Cornelissen, J. H. C. 1395
Cornelius, J. 2177
Cornelius, J. P. 9985
Cornford, C. A. 7641
Cornic, G. 4690
Corns, I. G. W. 255
Cornu, D. 2587, 4812
Corona, P. 1739, 2640, 3486, 9626
Corona Nava, V. E. 1589
Corrado, G. 703, 6699
Correa, M. 8688
Corredor, J. E. 5520, 8857, 9052
Correia, O. 5367
Correia, O. A. 4514
Corriveau, A. 559
Cortés B., M. 2663
Cortijo, M. 3047
Cortina, J. 5251, 6281, 7889, 7911
Cosby, B. J. 3677
Cosme, J. 1844
Cost, N. D. 1022
Costa, A. C. L. de 3736
Costa, C. G. 2038
Costa, D. H. M. 6180
Costa, H. H. 9232
Costa, J. C. 7288
Costa e Silva, J. 567
Costantini, A. 7547, 7551, 7553
Costeollo, L. R. 5906
Costes, E. 4642
Costonis, A. C. 7608
Côté, B. 885-886, 2615, 2811, 4493, 5358
Cotrufo, M. F. 5255, 7900, 7908, 8790
Cottrell, T. R. 9020
Coudret, A. 6469
Coughenour, M. B. 2156
Couhert, B. 6987
Couillerot, E. 2579
Couix, N. 7621
Coulaud, J. 4840
Coulibaly, C. 4463
Coulibaly, S. 1633
Coulson, C. L. 5874
Cour, P. 54
Courbaud, B. 4204, 9585
Courchesne, F. 886, 888, 3680
Cournoyer, L. 3684
Courraud, R. 4152
Coûteaux, M. M. 3583
Coutinho, M. 3540
Couto, L. 6723
Coutts, M. 6273
Couturier, G. 5048, 5698
Covarrubias, R. 1101
Covassi, M. 9143, 9155-9156
Covington, W. W. 1191, 3956
Cowan, M. 8824
Cowan, R. S. 3857-3858
Coward, L. P. 1814
Coward, P. A. 4081
Cowell, C. M. 2151
Cowell, J. E. 5143
Cowles, R. S. 7469
Cowling, R. M. 531, 1305, 3077
Cowper, J. 9035
Cox, D. P. 2768
Cox, E. S. 6991
Cox, O. 1635
Cox, P. A. 6266
Cox, R. M. 1979, 3659
Cox-Foster, D. L. 5499
Coyea, M. R. 5702
Cozzi, A. 3025, 4718, 5951
Crabbé, J. 6422
Crabtree, R. C. 1155, 2020
Craig, R. 5499
Cramer, L. H. 7611
Cramer, W. 3110
Crane, P. E. 5623, 8116, 8345
Crane, P. R. 5377
Crannell, W. K. 2231
Cranshaw, W. S. 7491
Craven, L. A. 2118
Crawford, R. 4004
Crawley, M. J. 9023
Creech, G. 8457
Cregan, P. 9028
Cregg, B. M. 1889
Cremer, K. W. 6405
Cremiere, L. 9035
Cress, D. W. 8128
Cresser, M. S. 10083
Creus Novam, J. 2441
Creus Novau, J. 6766
Crews, T. E. 7882
Criddle, R. S. 3014
Cripps, C. 601
Crisci, J. V. 3995
Cristi, R. 274
Cristofaro, A. de 7908
Critchley, C. 7197
Crivelli, A. J. 9236
Crockford, K. J. 6830, 6861, 6942
Crohn, D. M. 3420, 5855
Croisé, L. 1934
Cromer, R. N. 32, 1133, 1717, 3353, 4182
Crompton, H. 1204

Cronan, C. S. 1593, 6315, 8827
Croom, E. M., Jr. 4308
Cropper, W. P., Jr. 3005, 4695, 5412
Cros, E. T. du 836
Crossley, A. 8841
Crossley, D. C. 7014
Crosti, P. 6499, 7179, 8104
Croteau, R. 452, 3399, 6484, 6495, 8114
Crous, J. W. 7073
Crous, P. W. 7403
Crout, N. M. J. 9357
Crow, J. F. 5065
Crow, T. R. 1587, 3587, 3699, 4130, 4799, 6911
Crowder, L. B. 3209
Crowe, M. L. 7468
Crowhurst, R. N. 8296
Crowley, C. M. 5349
Crowley, G. M. 2126
Crozier, R. H. 8356
Cruiziat, P. 310
Crumpacker, D. W. 3070
Crunkilton, D. D. 5594
Cruz, A. P. 5802
Cruz, C. D. 587
Cruz, L. U. de la 8624
Cruz, R. E. de la 6614
Cruz Senna, R. 8871
Cruzat, C. 1236
Csányi, S. 4914
Csóka, P. 2771
Csomós, S. 6206
Csurhes, S. M. 168
Csuti, B. 9298
Cuadrado, S. 1824
Cubbage, F. W. 2459, 6854, 6990
Cubillos D., V. 992
Cuco, A. 2775
Cuda, J. P. 167
Cuello A., N. 9901
Cuenca, G. 5596
Cuenca, W. P. 2782
Cuevas, E. 1938, 4537, 5269, 5357
Cuevas Gozalo, J. M. 6241, 6751
Čufar, K. 9862
Cui, B. 441
Cui, K. M. 6401
Cui, Y. Z. 4583
Cullum, F. J. 2562
Cumbá, B. 1557
Cumming, A. B. 8495
Cumming, J. R. 1141
Cumming, S. G. 1814, 3500
Cummings, D. L. 527, 2922
Cummins, K. W. 7898
Cummins, T. 3632, 3664
Cundy, T. W. 349
Cúneo, N. R. 8072
Cunha, G. G. 870
Cúnha, L. H. de S. 2147
Cunha, R. 8569
Cunliffe, R. N. 8156
Cunningham, G. M. 12
Cunningham, J. C. 677
Cunningham, R. B. 2025, 2388, 3194
Cuny, P. 8532
Curnutt, J. L. 3197
Currah, R. S. 9996
Curran, P. J. 1047, 6225, 6465, 8732
Current, D. 10098
Curry, J. 7112
Curtin, C. G. 9940
Curtis, J. D. 2967, 8067
Curtis, P. S. 3548, 5228, 6433, 6798, 7191
Curtotti, R. 6999
Cusano, G. 8119
Cuteri, A. 9830
Cutini, A. 8664, 8898
Cutler, D. F. 7121, 10140
Cutter, B. E. 4141, 8029, 9863
Cutting, J. G. M. 3386
Cuza, P. A. 9054
Cwielong, P. P. 8288
Cwynar, L. C. 6532
Czaninski, Y. 1233
Czeczuga, B. 7300
Czępińska-Kamińska, D. 137
Czerwczak, M. 3108
Czygan, F. C. 4742
Da Araujo, P. R. 291
Da Rocha, H. R. 8871
Da S. Maía, J. L. 2364
Da Silva, D. da C. P. 9907
Da Silva, E. D. 4085
Da Silva, J. A. A. 5728
Da Silva, M. F. das G. F. 3742
Da Silva, M. F. F. 2767
Da Silveira, T. S. 870
Daalen, J. C. van 223-224
Dabrowski, P. 4125
Dæhlen, O. G. 3378, 3829
Dagar, J. C. 297
Dahal, D. R. 9291
Dahlgren, R. A. 2907, 8139, 9690, 9705
Dahlin, B. 9605
Dahlsten, D. L. 4898, 5798, 7482
Dahn, H. G. 1036
Dähne, J. 9993
Dai, Z. R. 5684
Daigle, S. 917, 9459
Dakora, F. D. 9815
Dale, V. H. 1960, 4955
D'Alessandro, S. 2889
Dalkeith, Earl 6204
Dalla-Tea, F. 2859
Dallara, P. L. 5645
Dalling, J. W. 4793, 6563, 6581
Dallmeier, F. 7685
Dalmacio, R. V. 6016
Dalrymple, N. K. 3730
Dalsgaard, K. 3078
Dalsgård, M. 5256
Dalton, C. T. 5277
Daly, D. C. 4742
Dalzell, B. 9201
Dalziel, T. R. K. 3414
Dam, B. C. van 1464
Dam, D. van 5318, 9364
Dambrine, É. 2863, 4488, 4552, 7648, 8814
Dames, J. 9409
Damez, M. 5572
Damme, E. J. M. van 5563
Damme, L. W. van 2634
Damme, P. van 982
Damodar Sharma 8255
Danaatmadja, O. 930, 972, 1530
Danayak, S. C. 904, 1539, 1651, 1734, 1743
Danborg, F. 3683
Danbury, D. 2461
Dancik, B. P. 5479, 7370-7372
Dandin, S. B. 7801
Dane, F. 592, 2217
Danell, K. 7523, 10069, 10071
Danell, Ö. 1431, 3134
Dang, Q. L. 5478
Dange, R. P. 4120
Dangerfield, C. W. 954
Daniel, G. 5629
Daniel, J. N. 14
Daniel, P. 6522
Daniele, E. 2889
Danielewicz, W. 1175, 1575, 2140
Danilin, I. 9494, 9965
Danjon, F. 1675, 4202, 5496
Danso, S. K. A. 1289, 3994, 5153, 6321, 9724-9725
Dantas, M. S. F. 7723
Daoudi, E. H. 4672
Daoust, G. 559, 9871
Darkwa, N. A. 4993
Darley, C. R. 6863
Darling, L. M. 4358
Darrall, N. M. 4562
D'Arrigo, R. D. 4140
Darrow, W. K. 7722, 7794, 7873
Darshan Singh 1993
Dart, P. J. 6620-6621, 7718
Daruhi, G. 4168
Darveau, M. 4072
Darvell, B. W. 8049
Das, A. B. 8235
Das, D. K. 402-403
Das, P. 115, 1702, 4281, 5091, 8235
Das, P. K. 865, 1631, 7802, 9790
Das, S. 6173, 6177, 7732
Das, S. K. 3272
Das, T. N. 266
Dasappa 107, 1804
Dascanio, L. M. 3081
Dassanayake, M. D. 1374
Dastgheib, F. 8638
Daszkiewicz, P. 1161
Date, G. P. 956, 958
Date, R. A. 6621
Dateman, G. E. 5735, 8340
Datla, R. S. S. 2221, 3975
Datta, B. K. 4650
Datta, P. C. 9564
Datta, R. K. 2594, 7802
Datta, S. K. 9404
Daube, B. C. 8924
Daudet, F. A. 1257, 2487, 7654
Dauer, K. 8073
Daugharty, D. A. 8009
Daughtrey, M. L. 7406
Dauvergne, P. 722
Dauzat, J. 9356
Davenhill, N. 4342
Davenhill, N. A. 1758
Davey, C. B. 3266
Davey, S. M. 3355, 7272
David, A. 124
David, B. 3846
David, H. 124
David, J. S. 3687
David, R. 2407
David, T. S. 3687
Davidson, C. G. 2947, 2956, 4619, 7340
Davidson, D. W. 3716, 9134
Davidson, E. A. 4085
Davidson, J. 4897
Davidson, J. A. 2374
Davies, G. J. 1609
Davies, I. 1525
Davies, N. W. 2986, 3768
Davies, P. E. 6358
Davin, L. B. 2019
Davis, C. 8539
Davis, D. D. 36
Davis, F. W. 1858, 6227
Davis, G. W. 528
Davis, J. 7903
Davis, J. A. 3679
Davis, J. M. 2214
Davis, L. S. 4199, 6753
Davis, M. R. 8021
Davis, R. B. 6531, 8150
Davis, R. J. 4086
Davis, S. 2810
Davis, S. D. 4621
Davis, S. H. 3494
Davis, T. D. 89, 6605
Davis, W. C. 6852
Davis, W. E. 6072
Davis, W. P. 6264
Davradou, M. 8820
Dawes, W. 7551
Dawkins, B. 3088
Dawson, A. F. 651
Dawson, I. K. 5548
Dawson, J. O. 1197, 4841, 4848
Dawson, M. I. 499
Dawson, P. J. 332
Dawson, R. J. 239
Dawson, T. E. 2835, 3321, 6576, 9335
Dawson, W. M. 2276
Day, E. R. 5736
Day, F. P. 312
Day, K. R. 2353, 7453
Day, R. K. 7440, 7445
Day, T. A. 3539
Dayal, R. 4673, 7601, 8135
Dayanandan, B. 3034
De, A. B. 6627
De, B. 9564
De Aguiar, A. P. M. A. 7352
De Alba-Avila, A. 7476
De Alcaraz, A. H. F. 6548
De Almeida, A. F. 7133, 7289
De Almeida, B. F. 6180
De Almeida, É. C. 9898
De Almeida Alves, T. M. 9798
De Alvarenga, A. A. 9440
De Andrés, B. 7177
De Angelis, P. 1037-1038, 7194
De Araujo, F. D. 8038
De Barros, S. A. 4283
De Blois, P. 1401
De Bock, F. 1936
De Boucaud, M. T. 1698
De Carvalho, A. G. 2364
De Carvalho, C. R. 4085
De Carvalho, J. O. P. 6180
De Casenave, J. L. 7271
De Castro, F. 1179
De Costa, A. C. L. 3736
De Cristofaro, A. 7908
De Deus Medeiros, J. 5384
De Feo, V. 5436
De Figueiredo, R. A. 9881
De Figueroa, L. I. 9065
De Filippis, L. F. 5073
De Foucault, B. 803
De Freitas, C. R. 1413
De Gier, A. 6216
De Grandi, G. F. 3515
De Granville, J. J. 7620
De Groof, H. 3515
De Groot, P. 3843, 5677, 6667, 9186
De Hartingh-Boca, G. 4125
De Hercé, É. 4405
De Jesus, R. M. 1179, 9898
De Jong, E. 8386
De Jong, R. 1617
De Jonghe, F. 7610
De Kam, M. 1453, 1465
De Kochalca, N. L. 1378
De Kock, M. 3778
De Kort, I. 350
De la Cruz, L. U. 8624
De la Cruz, R. E. 6614
De Lacy, T. 7017
De Lajudie, P. 7389
De Lange, W. J. 576
De las Heras, J. 1195, 5364
De las Heras, P. 3705
De Leede, B. 8471
De Leeuw, P. N. 7148
De Lozano, N. B. 492
De Luis, E. 1384
De Madron, L. D. 9533
De Matos, G. C. 9908-9909
De Matthaeis, P. 5208
De Mattos, E. A. 5407
De Menthière, N. 2654
De Montalembert, M. R. 3354
De Montard, F. X. 5876, 5888, 7580
De Moraes, J. A. P. V. 5407, 6035
De Morretes, B. L. 5384
De Natale, F. 364
De Nitto, G. A. 2303
De Oliveira, A. B. 9838
De Oliveira, C. A. L. 9907
De Oliveira, G. G. 9838
De Oliveira, L. C. 6180
De Oliveira, M. de L. A. A. 7245
De Oliveira, R. R. 9907
De Oliveira, V. L. 5611
De Pablo, C. L. 3871, 8407
De Paula, J. E. 5047, 6430, 6538, 9919
De Paula, T. J., Jr. 602
De Pinho, S. Z. 4283
De Reffye, P. 9356
De Rocher, T. R. 4379
De Rogatis, A. 8585
De Ronde, C. 126, 294, 4613
De Rosa, M. C. 9830
De Ryck, M. 949
De Salis, T. 4762
De Santo, A. V. 6285, 7908
De Santo, T. L. 3219

De Silva, J. 630
De Sloover, J. R. 3876
De Steiguer, J. E. 1056, 2779
De Taffin, G. 3408
De Temmerman, L. O. 7085
De Tillesse, M. 9691
De Turckheim, B. 8723
De Vasconcelos, M. J. P. 2920
De Verno, L. L. 573
De Villiers, A. J. 8391
De Visser, P. H. B. 3632, 3664, 5290, 7963
De Vletter, J. 8601
De Vries, B. 3590
De Vries, F. W. 9074
De Vries, M. 8062
De Vries, R. A. J. 5460
De Vries, S. M. G. 826, 1062
De Vries, W. 1163, 1967, 5338, 7978
De Winter, J. 4960
De Wulf, R. 7604
De Zayas, E. 1458
De Zeeuw, C. 495
Deacon, R. T. 5862, 8412
Deal, R. L. 928
Dean, D. J. 3349
Dean, J. F. D. 3775, 6460, 8249, 9849
Dean, T. J. 3453
Dean, W. 6779
Dean, W. R. J. 3837
Deans, J. D. 4476, 9412
Deans, R. 9816
Deb Roy, R. 9280
DeBarr, G. L. 4045
Debaud, J. C. 4003, 8284
DeBell, D. S. 947, 6784, 9869
DeBell, J. D. 1178, 4350
Deblonde, G. 4186
Debouzie, D. 6283, 7464
Debrauwer, L. 9799
Debrinyuk, Yu. M. 1783, 5185
Debroy, R. 2463
Debus, R. 2566
Debus, S. 10064
Debussche, M. 3092
Decaix, G. 5879
Décamps, H. 1572
Deceuninck, B. 4909
Dechambre, M. 7009
Declerck, V. 1703
DeClerck-Floate, R. 7495
Dedek, W. 3191
Dedina, S. 6795
Deegen, P. 4197
Deeken, K. P. 811
Deen, R. T. 9575
Deering, D. W. 1046
DeFerrari, C. M. 3870
Degen, B. 2219
Degen, R. 1378
Degenhardt, A. 791
DeGraaf, R. M. 1524
Degreef, J. 8940
Dehairs, F. 4676
DeHayes, D. H. 2864, 6586
Deidda, P. 4293, 6066
Deinum, G. 7105
Deiva Oswin, S. 4675
Dejean, A. 6561
Dekhtereva, L. P. 783
Dekker-Robertson, D. L. 1674
Del Barrio, G. 7516
Del Bene, G. 9140
Del Caldo, L. 5341
Del Cali, I. H. 2750
Del Carmen Pérez, M. 1321
Del Castillo, C. A. 8857
Del Favero, R. 6012
Del Fueyo, G. M. 8072
Del Gatto, F. 9607
Del Pero Martinez, M. A. 420
Del Pozo, V. 7177
Del Río, L. A. 3776
Del Sorbo, G. 2269
DeLacy, T. 3533
Delate, K. M. 9137
Delatour, C. 3807, 3811, 4020, 4511, 5642
DeLaune, R. D. 1120, 1949, 3397, 6270
Delcourt, G. 8546
Delcourt, H. R. 3888
Delcourt, P. A. 3888
Delduc, P. 2792
Deléens, E. 1257
Deleuze, C. 5018
Delevoryas, T. 8051
Delfino-Mix, A. 9114
Delfs, J. 9381
Delgadillo, J. 6548
Delgado, J. 6442
Delgado Valerio, P. 6876
Delhaye, L. 7877
Delin, A. 2390
Delisle, C. E. 9473
Dell, B. 901, 1123, 1146, 3155, 3441, 4006, 5297, 5579, 5608, 5610, 6323, 6780, 8275
Della Lena, S. 7782
Dell'Antone, P. 9845
Dell'Arciprete, V. 835
Dellavalle, I. 9112
Delle Monache, G. 9830
Delmas, R. 385
Delmond, B. 3746
DeLoach, C. J. 167
Delogu, G. 6158
Delprete, P. G. 7235
DeLucia, E. H. 1878, 3552, 4406
Delwaide, A. 1827, 2688
Demarcq, P. 6928, 6932, 9421
Demattio, H. 4235
Dembélé, B. 8322
Dembner, S. 1588
Dembner, S. A. 4125
Dembny, H. 121, 123
Demeo, T. E. 6562
Démesure, B. 5519
Demetry, A. 9314
Demment, M. W. 3120
Demmig-Adams, B. 6477
Demolis, C. 7538, 9711
Dem'yanov, V. A. 341
Den Biggelaar, C. 10105
Den Boer, P. J. 1519
Den Hartog, G. 6262
Dénamganai, J. 6439, 9802
Denha, A. M. 8499
Denison, N. P. 552-553
Denmark, Danish Forest and Landscape Research Institute 743
Denmark, Danish International Development Agency 4232
Denne, M. P. 1988, 5151, 6133
Dennis, E. S. 7376
Dennis, J. 4854
Denslow, J. S. 548
Densmore, K. J. 5743
Densmore, R. V. 939, 3950
Deo Narayan 2876
D'Eon, S. P. 7000
Deora, N. S. 3402
D'Epenoux, F. 2702
Derchi, P. 9636
Derevyankin, P. V. 10018
Derome, D. 1920
Derome, J. 7762, 7879
Derrick, E. K. 6863
Dery, S. 3834
Desanker, P. V. 4212, 4223
DesGranges, J. L. 7536
Desh Raj 1615
Deshayes, M. 4449
Deshpande, V. P. 2317
Desmet, G. 4177
Desponts, M. 6746
Desprez-Loustau, M. L. 4256
Dessureault, M. 9124
Deswarte, C. 7375
Detling, J. K. 2670
Detrez, C. 5093
Detsch, R. 7565
Deus Medeiros, J. de 5384
Deusen, P. C. van 261, 1026, 9352
Dev Bhardwaj, S. 141
Devaiah, P. K. 1513
Devall, B. 5923
Devaranavadagi, S. B. 10114
Devaux-Ros, C. 244
Devender, T. R. van 8147
Devêvre, O. 2228
Devey, M. 5508
Devey, M. E. 8208, 9114
Devi, Y. S. 2598
Devillez, F. 9691
Devindar Singh 913
Devitt, D. A. 8804
Devlin, D. R. 6658
Devos, P. 8750
DeWalle, D. R. 1590, 2903
Dewar, R. C. 2633, 4315
Dewees, P. A. 4166, 8527, 9260
Dewettinck, D. 8266
Dexheimer, J. 2248, 5573
Dhakre, J. S. 1366
Dhall, S. P. 789
Dhamala, B. R. 8775
Dhanakumar, A. G. 4101
Dharmasena, P. B. 6731
Dharmawardhana, D. P. 6473
Dhawan, V. K. 2673
Dhillion, S. S. 5272, 8261
Dhiman, R. C. 95, 7624, 8954
Dhir, N. K. 5479
Dhivert, H. 54
Dhondt, A. A. 5717, 7514
Dhôte, J. F. 4405, 4753
Dhuria, S. S. 871-872, 6044
Di Battista, C. 5595
Di Fazio, S. 6246
Di Giusto, F. 8244
Di Guardo, A. 1978
Di Lonardo, V. 4021, 5340, 5510, 6020
Di Michele, M. N. 9444
Di Stasi, L. C. 6153
Diaci, J. 5444, 5459
Diagne, O. 10002
Diallo, A. 9782
Diallo, I. 9981
Diallo, N. 9242
Diallo, T. O. 8520
Diamantopoulos, J. 3945
Diangana, D. 6980
Diarra, L. 7148
Dias-Filho, M. B. 6576
Dias-Leme, C. L. 6415
Diaz, C. 9775
Diaz, C. A. 6695
Díaz, H. 518
Díaz, S. 3914, 4773
Diaz-Fierros, F. 384
Díaz Gonzales, J. 6431
Díaz Maldonado, E. R. A. 2577
Díaz-Sala, C. 6436
Dick, J. M. 880, 1693, 2602, 3042, 6890, 8955
Dick, M. A. 5649
Dickie, J. B. 6040
Dickinson, G. 2637
Dickinson, G. R. 8395
Dickinson, K. J. M. 1386, 3088
Dickinson, N. M. 8276, 8855
Dickison, R. B. B. 8009
Dickison, W. C. 392
Dickmann, D. I. 9027
Dickson, J. H. 510, 5937
Dida, M. 6707
Diebel, K. E. 2668, 5059, 9332
Dieffenbacher-Krall, A. 8151
Diego, V. H. 9295
Diehl, M. 5863
Diem, B. 1290
Diem, H. G. 598, 2238, 6313
Dieringer, G. 2094
Dierolf, T. S. 4113
Dierschke, H. 9780
Diesburg, K. L. 8643
Dieterich, H. 6511
Dieters, M. J. 75, 8507
Dietrich, F. 1218
Dietrich, S. M. C. 7218
Dietrichson, J. 4999, 8041
Dietsch, C. 5405
Dietz, B. 4235
Díez, C. 1384, 8433
Dighton, J. 8271
Dijk, C. van 4852
Dijk, H. F. G. van 3665, 5318, 5323
Dijk, S. van 1681
Dijkstra, P. 7193
Dikshit, R. P. 5298
Dilip Kumar, P. J. 9393
Dillenburg, L. R. 6122, 8764
DiMaio, E. 8316
Diminić, D. 4855
Dimmitt, M. A. 3030
Dimpflmeier, R. 6511
Dinant, M. 9034
Dindo, M. L. 1492
Diner, A. M. 4289
Dinerstein, E. 692
Ding, Y. X. 8018
Diniz, A. C. 9908-9909
Dinkelaker, B. 8890
Dinkelberg, W. 7922
Dinus, R. J. 9849
Diodato de Medina, L. 2301
Diouf, B. 9294
Diouf, D. 9994
Dipak Sarmah 47
Dippel, C. 2356
Dirr, R. J. 3294
Dirzo, R. 540, 6648
Discours, D. 4488
Dise, N. B. 5322
Dishongh, G. 8385
Dissescu, R. 8662
Dittrich, A. 5315
Dix, M. E. 9189
Dixon, M. 4473, 5325
Dixon, M. A. 5281-5282
Dixon, P. M. 551, 3965
Dixon, R. K. 596, 1188, 2795, 3149, 6123
Dixon, W. N. 674, 6927
Dizengremel, P. 459, 2082, 3620, 3657, 3761, 5953
Djaingsastro, N. 1711, 1788, 1831, 2414
Djajanegra, A. 4181
Djermanović, V. 6437
Djimdé, M. 1565
Dlugi, R. 3649
Dmitriev, V. P. 1541
Dmuchowski, W. 1153
Dmyterko, E. 7285
Do Amaral, I. L. 3566
Do Carmo, A. P. T. 9898
Do Nascimento, E. C. 5713
Döbbeler, P. 9121
Dobbertin, M. 4721, 7675
Dobkin, D. S. 4922
Dobkowski, A. 5140
Dobranic, J. K. 6607
Dobrovol'skiy, G. V. 5258
Dobrynin, Yu. A. 8631
Dobson, M. 6710
Dobson, M. C. 1029, 7012
Dockered, B. 1627
Dodd, R. S. 1988, 2195, 2198, 5387
Dodds, D. G. 4422
Dodell, B. 3652
Dodson, J. R. 4762
Doescher, P. S. 8808
Doggett, C. A. 4889
Dogra, P. D. 2940, 7624
Doguet, S. 659
Doherty, M. D. 3329
Doherty, S. 2517, 4236, 5973
Dohrenbusch, A. 8497, 9342
Doiron, M. G. 4275
Dokk Glawischnig, T. 4668
Doku, E. V. 1668
Doležel, J. 8191
Doleželová, T. 6884
Dolgin, M. M. 664
Dolling, A. 5464
Dolph, K. L. 8605
Dolukhanov, A. B. 1787
Domenach, A. M. 1909, 8081
Dominy, S. W. J. 187, 1795
Domir, S. C. 4863
Dommergues, T. R. 2238
Dommergues, Y. 6807
Domon, G. 4097, 8439

Domon, J. M. 124
Donahue, R. A. 6605
Donald, D. G. M. 126, 179-183, 273, 8570, 9505
Donaldson, B. G. 1998
Donaldson, L. 1604
Donaldson, L. A. 1223, 3735, 4814
Donaubauer, E. 5418
Dondjang, J. P. 3458
Doner, L. W. 8282
Dong, H. 3366
Dong, H. R. 8243
Dong, J. Z. 3394
Dong, Q. 9210
Dong, Y. 7677
Dongen, S. van 5717
Doniţă, N. 3920
Donkin, M. J. 1002
Donnelly, C. F. 2025, 2388, 3194
Donnelly, J. R. 7196, 8934
Donnini, D. 6609
Dono, G. 705
Donoso H., P. 6184
Donoso Z., C. 2663
Donoso Zegers, C. 2660, 2663
Dool, E. van den 9084
Doorsselaere, J. van 2087, 7377
Dopheide, J. C. R. 1296
Dorado, M. M. 5400
Doran, J. C. 2201, 2220, 3748, 3990, 6018
Doran, S. J. 5011
Dore, C. 7987
Dore, M. H. I. 3352
Döring, J. 8498
Dorion, N. 5012
Dormling, I. 3972, 6429
Dorn, R. D. 8136
Dorp, D. van 1519
Doruska, P. F. 6187
Dorworth, C. E. 8254
Doss, G. J. 9748
Dosskey, M. G. 3685
Dosso, M. 7009
Dosunmu, M. I. 8921
Dotta, A. 6114, 9540
Doubt, J. 2936
Douce, G. K. 5704
Douce, R. 461
Doucet, C. M. 4904
Doucet, R. 9491
Doudrick, R. L. 2274, 9997
Douds, D. D., Jr. 8282
Dougherty, P. M. 1272, 3331, 6977
Doughty, S. C. 2375
Douglas, A. W. 8975
Douglas, D. A. 8173
Douglas, M. 1806
Douglas, W. 7706
Douglass, L. W. 4255
Doumas, P. 2587, 3797, 4672, 4698, 4732
Dource, R. 6472
Dove, M. R. 4166, 10120
Dow, B. D. 9061
Dowgiallo, G. 303, 8792
Downer, J. A. 7469
Downes, G. M. 2949
Downey, J. S. 7124
Downie, B. 990, 3387
Downing, D. J. 5915, 7199
Downs, M. R. 9731
Doyle, T. W. 4481
Dozier, W. A., Jr. 7734, 8458
Draaijers, G. P. J. 2866, 3655, 6345
Drake, D. R. 1311
Drake, N. E. R. 3877
Drake Aranda, F. 959
Dralle, K. 7755
Dransfield, J. 7714
Dransfield, S. 7714, 8966
Drapeau, P. 5962, 8439
Drechsel, P. 4545
Dreiner, K. 4252
Dreistadt, S. H. 5691, 5783, 6788, 7509
Drew, A. P. 4272
Drew, K. W. 1507
Drewes, S. E. 8084
Dreyer, E. 2070, 2856, 4511, 4523, 4685, 7194
Dreyer, G. B. 9827
Dreyfus, B. 5093, 8266, 9725
Dreyling, G. 7041
Driessche, R. van den 3617
Dring, J. V. 1252
Drinkall, M. J. 1730
Drinnan, A. N. 5377, 8055
Driouich, A. 454
Driscoll, C. 2790
Driscoll, C. T. 319, 2907, 3666
Droessler, T. D. 3338
Droste, H. J. 2698, 6207
Drouet, A. 443
Drozdov, S. N. 3796
Druce, A. P. 3847
Druck, N. 148
Druilhet, A. 4551
Drumm-Herrel, H. 1276
Druškovič, B. 5335
Du, D. 6307
Du Burgess, F. F. 5015
Du Cros, E. T. 836
Du Merle, P. 8615
Du Penhoat, C. H. 3757
Du Penhoat, C. L. M. H. 8089
Du Puy, D. J. 7236, 9893
Du Toit, R. F. 6549
Duarte, A. 1499-1500, 7713
Duarte, C. 1844
Dubbel, V. 3212
Dubey, R. C. 617
Dubois, N. 5793
Dubourdieu, J. 9611
Dubová, M. 7087
Dúbravcová, Z. 520
Dubs, R. 8944
Ducasse, D. A. 1466
Ducci, F. 111
Duchaufour, P. 1104
Duchesne, L. C. 5635, 6543, 7387, 9964
Duchesne, S. 8882
Duckham, S. C. 8015
Ducousso, M. 2236, 7389
Ducrey, M. 4682, 8615
Dudek, C. 714
Dueck, T. 1971
Duever, M. 4480
Duff, A. B. 3137
Duff, E. I. 5274
Duff, G. A. 1266, 3597, 8937
Dufour, J. 5521
Dugas, W. A. 2491
Duguma, B. 2542, 6734
Duhan, J. S. 7316
Duhoux, E. 2238, 9994
Duinker, P. N. 6738
Duivenbode, J. A. D. V. R. V. 2904
Duivenvoorden, J. F. 3921, 5446
Duke, J. A. 747
Duke, S. D. 4653
Dulière, J. F. 8940
Dulsalam 196
Dumas, B. 2087
Dumas, E. 5075
Dumas, J. M. 2638
Dumortier, M. 6899
Dun, C. Z. 5043
Dun Chzhaotszyun' 5043
Duncan, C. P. 306
Duncan, J. E. 4090-4091
Duncan, M. W. 3835
Duncan, R. P. 3964
Dunham, R. A. 9519
Dunin, F. X. 15
Dünisch, O. 2897, 5345
Dunkel, K. 8744
Dunlap, J. M. 3996
Dunlop, P. J. 2973, 3747, 8076
Dunn, A. 9299, 9305
Dunn, G. M. 5052, 5129, 6729
Dunne, T. T. 1305
Dunning, J. B., Jr. 5817, 9217
Duno de Stefano, R. 9902
Dunsdon, A. J. 1673, 3372
Dunstan, D. I. 3394
Dunstone, N. 7542
Duplat, P. 6987
Dupouey, J. L. 3090, 9585
Dupraz, C. 5881-5882, 5888, 10111
Dupuis, F. 4256
Dupuis, J. Y. 5571
Dupuis, L. A. 9221
Dupuy, B. 4333, 6106, 7389, 9495
Dupuy, J. M. 1408
Dupuy, N. 5667, 8266
Durall, D. M. 4004-4005
Durand, H. 244
Durand, P. 6313
Durden, S. 1042
Durel, C. E. 8222, 8228, 9970
During, H. J. 3550
Durka, W. 3823
Đurović, Z. 2314
Durrant, D. W. H. 7127
Durrieu, G. 5660
Durrieu, S. 4449
Durst, P. B. 9388
Duryea, M. L. 84, 3443
Durzan, D. J. 4279, 5072
Duś, D. 8684
Dušanić, L. 2325
Dusser, M. 5572
Dustin, I. 6398-6399
Dutch, J. 895, 1136, 6110
Dutt, A. K. 1669, 2557
Dutt, P. 2461
Dutt Tripathi, N. 4268
Dutta, A. 9790
Dutta, I. C. 8255
Duvernoy, I. 5861
Duyzer, J. H. 2877, 2904, 7105
Duzhenko, V. S. 7916
Dvořák, J. 2042
Dvořák, V. 7088
Dvorak, W. S. 3979, 7348
Dvořáková, D. 3304
Dvoretskiĭ, N. I. 4657
Dwivedi, U. N. 2221
Dwyer, C. P. 6682
Dwyer, G. 9162
Dwyer, J. F. 3284
Dwyer, J. P. 6363, 6504, 9863
Dyck, W. J. 1135, 4175
Dye, D. G. 1347, 5206
Dye, K. L., II 6556
Dye, P. J. 3612
Dyer, J. M. 480, 9665
Dyer, M. I. 1475
Dyess, J. G. 4053
Dykstra, D. P. 1012
Dymant, T. J. 8282
Dymock, I. 5479
Dymowski, W. 8684
Dziedzic, J. 2139
Dziewolski, J. 2163
Dzwonko, Z. 1394
Eagleson, P. S. 3061
Eakes, D. J. 7734, 8458
Eamus, D. 1266, 3597, 8937
Eardley, C. D. 9175
Earle, C. J. 3289
Eason, C. T. 1506
Eason, G. 9738
Eason, W. R. 6725
East, K. 1693
Easter, M. J. 4472
Eastlack, S. E. 4522
Eastman, P. A. K. 7062
Eberhard, A. 8556
Eberhardt, T. L. 604, 2019, 5621, 8101
Ebermann, R. 3660
Ebersole, J. J. 2872
Ebert, H. P. 5936
Ebinger, J. E. 4745
Ebner, P. 1159
Eby, B. M. 1609
Echarri, J. 835
Echarri, J. A. 909
Echeverría, J. 8445
Echeverría, N. E. 860, 943, 1494
Eck, T. F. 1046
Eckberg, T. B. 7491
Eckersley, P. 9284
Eckersten, H. 4210
Eckert, R. T. 3658
Eckey, R. 2669
Eckmüllner, O. 7652, 7754
Eckstein, D. 2494, 3319, 6760, 8894
Economou, A. 4273
Economou, A. S. 5104
Edashige, Y. 7173
Edberg, R. J. 5906
Eddleman, L. E. 8808, 9791
Edelhoff, A. 2669
Edelin, C. 404, 7164
Edenius, L. 7523, 10071
Eder, B. K. 2507
Edfast, A. B. 2611
Edge, W. D. 3213
Edmonds, R. L. 1098-1099, 1903, 4496, 4856, 8825
Edmondson, R. D. 1812
Edrich, F. 5045
Edwards, A. 8025
Edwards, D. G. 7718
Edwards, D. R. 5281-5282
Edwards, G. S. 3648, 4703, 6347
Edwards, M. B. 954, 6124
Edwards, N. T. 1963
Edwards, R. 2411
Edwards, S. 1596
Edwards, W. R. N. 2841
Edwards-Jones, G. 5892
Edzīnovīch, V. A. 6326
Eerden, L. J. M. van der 1966, 3645
Eerden, L. J. van der 2045
Eerden, L. van der 1971, 3789
Effenberger, S. 3016
Effendi, M. 6039, 6051, 6070, 6595
Effendi, R. 1776, 1803
Efimtsev, E. I. 7198
Egerton-Warburton, L. M. 6466
Egertsdotter, U. 6049
Egger, B. 3016
Eggertsson, O. 5913, 8464
Egli, A. E. 4961
Egorov, A. B. 8635
Ehleringer, J. 7031
Ehleringer, J. R. 3615, 3800, 4505, 5225, 6303, 9134
Ehnström, B. 4126
Ehrenfeld, J. G. 7875
Ehrig, F. 8318
Ehrlich, D. 2764, 7010
Eiberle, K. 1302
Eiberweiser, M. 288
Eiblmeier, M. 2883
Eichenberger, J. K. 7649
Eichhorn, J. 1593
Eichinger, W. E. 1028
Eid, J. 2482
Eid, T. 5218
Eiden, R. 331, 2953
Eidmann, H. H. 10045
Eifler, I. 6511
Eilertsen, O. 3941
Einert, P. 7103-7104
Einhorn, J. 5700
Einig, W. 2072, 3016
Eira, M. T. S. 8569, 8574
Eisele, F. L. 1048
Eisenhauer, D. R. 925
Ejiri, Y. 1871
Ek, H. 5583
Ek, R. van 3655, 6345
Ekberg, I. 2178, 3132, 8040
Ekblad, A. 3015
Ekbohm, G. 6285, 9701
Ekbom, B. 9133
Ekeberg, D. 6348
Eklund, L. 5403
Eklund, M. 6759
Ekman, P. 8538
Ekö, P. M. 7120
Ekpo, M. U. 8325
Ekschmitt, K. 7931
Ekstrand, S. 1167, 1855
Ekuan, G. 1835, 2031

El-Abidine, A. Z. 1110, 3608, 5230, 8931
El-Borolossy, M. A. 9177
El-Demerdash, M. A. 1360, 8162
El-Domiaty, M. M. 3469
El-Feraly, F. S. 3469
El-Ghazaly, G. 9796
El-Hadj Moussa, F. 700
El-Karkouri, K. 5576
El-Kassaby, Y. A. 574, 2110, 3028, 3124, 3982, 4266, 5065, 9966
El-Kohen, A. 2069, 4464
El-Lakany, M. H. 3340
El-Modafar, C. 2275
El-Olemy, M. M. 3469
Elakovich, S. D. 8174
Elam, W. W. 2533-2534
Eldhuset, T. D. 1125
Eldridge, N. R. 3447
Elena Rossello, R. 8785
Eleršek, L. 2683, 2695, 5126, 5476
Elfving, B. 3367, 3745
Elfving, D. C. 9748
Elgegren, J. 8545
Elhag, H. M. 3469
Eliasson, C. 5708
Eliasson, M. K. 3392
Elichegaray, C. 1160
Elkinton, J. S. 5796, 9160, 9162
Ella, A. B. 412-413
Ellefson, P. V. 2530
Elliott, E. T. 5008
Elliott, H. J. 6656
Elliott, K. 5302
Elliott, K. J. 1270, 3121, 3593
Ellis, B. E. 6473
Ellis, F. 7073
Ellis, J. 4953
Ellis, J. E. 2156, 8153
Ellis, L. M. 4921, 8362
Ellis, R. C. 8408
Ellis, R. G. 5003, 6803
Ellison, A. M. 548, 625
Ellison, J. C. 525
Ellsworth, D. S. 1477, 4710, 6569, 9860
Elmes, G. A. 2333
Elmlinger, M. W. 3973
Elmqvist, T. 6266
Elowson, S. 6189
Elrasheed, M. A. 5983
Elsasser, P. 8744
Elsenbeer, H. 6251
Elsik, C. G. 340, 3002
Elston, D. A. 2760
Elumalai, S. 2941
Elyakime, B. 3360, 9407
Elz, D. 4101
Emeyriat, R. 8746
Emmanuel, C. J. S. K. 97, 151
Emmer, I. M. 5260, 6280
Emmett, B. A. 4081, 5242-5243, 5323
Emmingham, W. H. 4007, 5150, 8774
Ende, P. van de 8471
Enders, G. 3649
Endler, Z. 1377, 2139
Endo, M. 2225, 8653
Endtmann, K. J. 1202, 5997
Eng, K. 9855
Engelmark, O. 3064, 6800
Engels, J. M. M. 9029
Engle, D. M. 9689
English, B. C. 4245
Engsås, J. 8550
Engström, P. 5504, 5507, 8230
Ėnkhsaĭkhan, D. 8181
Ennos, R. A. 5550
Enns, K. 10074
Enoch, T. 2542
Enoki, T. 7772
Enright, N. J. 1413, 3032
Enters, T. 6805
Entry, J. A. 1455, 4007, 8774
Entwisle, T. J. 3296
Eom, Y. G. 397
Epp, H. T. 9622
Epron, D. 2070, 4690, 7194
Erasmus, D. 7876
Erazo, A. M. 1236
Erazo, S. 1236
Erb, D. 10152
Erdelen, W. 768
Erhard, M. 2813
Erickson, H. E. 1098-1099
Erickson, M. D. 1181
Erickson, W. A. 7671
Ericson, L. 5665
Ericsson, A. 2611
Ericsson, T. 318, 1431, 3373, 5292, 7077, 7955
Eriksen, A. B. 8816
Eriksen, E. N. 77, 9663
Erikson, D. L. 8405
Eriksson, A. 6284
Eriksson, G. 1422, 2178, 3132, 3972, 5343, 8040
Eriksson, H. 6983, 7981
Eriksson, H. M. 7129
Eriksson, I. 8168
Eriksson, K. E. L. 3775, 6460, 8249
Eriksson, L. O. 2513
Eriksson, U. 3134, 3828, 9477, 9875
Ermakov, V. E. 1364
Ernst, D. 4566, 8185
Ernst, W. 5801
Eroshenko, A. S. 5780
Erskine, P. D. 8807
Erusalimskiĭ, V. I. 1785
Esaki, K. 6655
Escamilla, J. A. 2860
Eschment, D. 5976-5977
Eschrich, W. 431, 455
Escobar R., B. 2663
Escobar R., R. 6134
Escobar Rodríguez, B. 2660, 2663
Escobin, R. P. 412
Escudero, A. 1388
Escudero, J. C. 9922
Escudero García, J. C. 7849
Eshenaur, B. C. 8314
Eshita, S. M. 4863
Eskonheimo, A. K. 6384
Espárrago, F. 1321
Espejo, R. 7295
Espelie, K. E. 6451
Esperanza, A. M. 2918
Espinosa S., J. E. 2094
Espinoza C., M. 4262
Espinoza de Pernía, N. 6428
Espírito Santo, M. D. 7288
Essen, P. A. 10029
Esser, G. 3551
Estes, J. E. 2764
Esteve, J. 8519
Estrada, A. 9205
Estrada C., A. E. 1329
Esvan, J. M. 3147
Eteshola, E. 3702
Étienne, M. 2152, 5877-5878, 8879
Etter, H. 6102
Euler, F. von 2178, 9415
Euler, K. L. 7808
Evans, B. 3184
Evans, C. S. 9979
Evans, D. G. 3270
Evans, H. 3184
Evans, J. R. 464
Evans, P. D. 2025
Evans, P. R. 7542
Evans, R. D. 4505
Evans, W. C. 8874, 8916
Evdokimov, A. P. 463
Evensen, C. I. 4113
Evenson, D. P. 9983
Everard, D. A. 5468, 7594, 8897
Everard, J. 6943
Everett, R. L. 9507
Everham, E. M., III 1892
Evers, F. H. 9732
Everson, D. A. 2918
Evidente, A. 8301, 8316
Ewald, D. 868, 4280
Ewald, H. A. 1812
Ewel, J. J. 6654
Exinger, F. 3281
Eymar, E. 10153
Eynden, V. van den 982
Eysteinsson, T. 9848
Ezell, A. W. 173
Ezenwa, I. 4298, 8421
Fabbio, G. 8610, 8616
Fabião, A. 8048, 8767
Facelli, J. M. 4791
Facklam, M. 4524
Fady, B. 833
Faeth, S. H. 642
Fagg, C. W. 2007, 5550
Fagnant, M. 3876
Fahey, B. 5833
Fahey, T. 319
Fahey, T. D. 1989, 5214
Fahey, T. J. 345, 1229, 2141, 2165, 2824
Fahrmeir, L. 4198
Failla, M. 1330
Fain, J. J. 2141
Fairfax, R. J. 2647
Fairhead, J. 1634, 5033, 8536-8537
Fairhurst, C. P. 10023
Fairweather, S. E. 4448
Faizuddin, M. 6016
Fajak, R. C. 5710
Fajardo, O. 1557
Falchieri, D. 9191
Falck, J. 6804
Falen, A. L. 3057
Falkengren-Grerup, U. 7885, 8164
Falkiner, R. A. 1096, 5110
Falkner, M. B. 9349
Fal'ko, N. V. 1962
Falkowski, P. G. 5415
Fall, P. L. 3881
Fall, R. 4681
Falleri, E. 9720
Falqui, A. 6066
Faltonson, R. R. 8406
Fan, S. 2845, 3018
Fan, S. M. 8924
Fan, W. G. 7483
Fang, J. M. 8910
Fang, J. Q. 3252
Fang, Q. C. 9807
Fang, Y. J. 3267
Fang, Y. L. 9058
Fanta, J. 1401, 9952
Farage, P. K. 1969
Farber, S. 9965
Farber, S. K. 4454
Fare, D. C. 8457
Faría-Mármol, J. 5061
Fariñas, M. R. 517
Farley, G. H. 4921
Farnsworth, E. J. 625, 6426
Farnsworth, K. D. 8044
Farooq, M. 6363
Farquhar, M. L. 9072
Farr, W. A. 928
Farrant, J. M. 839, 3385-3386, 3389
Farrar, C. D. 8874
Farrar, R. M., Jr. 771, 802, 4393
Farrell, A. W. 8810
Farrell, E. P. 3310, 3632, 3664
Farrell, R. E. 1138
Farrington, P. 3596, 4079
Farrow, R. A. 2554, 4031
Farrukh Hussain 4550
Fasce, D. 2369
Fastie, C. L. 3095
Fath, S. 3769
Faure, R. 9799
Faure-Raynard, M. 599
Faust, T. D. 2900
Fauvel, M. T. 8914
Favero, R. del 6012
Favilli, F. 2406, 9079
Favre, C. L. 4023
Favre, J. M. 4276
Favrichon, V. 6985
Fawcett, P. K. S. 3835
Fay, H. A. C. 2311
Faye, L. 124
Fayle, D. C. F. 6364
Fazio, S. di 6246
Fecker, B. 8327
Fedele, P. 6031
Fedele, P. L. 6031
Federer, C. A. 2506, 2790
Federl, R. 779
Fedorkov, A. 9118
Fedorov, O. E. 934
Fedoryak, V. E. 8945
Fedulov, V. S. 9517
Feger, K. H. 287, 7965
Fehlen, N. 4303
Feicht, E. 8333
Feigl, B. J. 8826
Feinsinger, P. 1470, 4954
Felbermeier, B. 1058
Felding, G. 8797
Felfili, J. M. 8177
Felipe Barnola, L. 4044
Feliu, C. 2393
Felker, P. 2596, 3137, 10003
Fell, J. W. 9066
Feller, M. C. 8880
Fellers, G. M. 7518
Felton, G. W. 8341
Fendero, P. 6439, 9802
Fengel, D. 2015, 6447, 6459, 8913
Fengler, E. 9065
Fenn, L. B. 3572
Fenn, M. E. 8845
Fensham, R. J. 2647, 3174-3175, 7081, 7283
Feo, V. de 5436
Feret, P. P. 9332
Ferguson, C. S. 5796
Ferguson, D. E. 6922
Ferguson, I. 2504, 5020
Ferguson, I. K. 8488, 8902
Ferguson, I. S. 7595
Fergusson, J. E. 3675
Ferhi, A. 4506, 4689
Ferm, A. 3450, 7968
Ferm, M. 1532
Fernándes, G. 7335
Fernandes, G. W. 3176
Fernandes, J. B. 3742
Fernandes, P. 6033
Fernandes, P. A. 7132
Fernández, A. 1499
Fernández, C. 6170
Fernández, D. S. 276, 1075, 9767
Fernandez, F. A. S. 7542
Fernandez, I. J. 3320, 3574, 7657
Fernández, J. 274
Fernández, M. C. 585, 7177
Fernandez, R. 3966, 5521, 9025
Fernández, R. N. 7851
Fernandez, T. V. 3282
Fernández Alonso, J. L. 1327
Fernández Bermejo, M. C 8035
Fernández Cancio, A. 2441
Fernandez-Duque, E. 2502
Fernández-González, F. 3928
Fernández-Guijarro, B. 8588
Fernando, E. S. 3997, 7220
Fernando, M. J. J. 5413
Fernándoz Cancio, A. 6766
Fernon, J. 1999
Ferrandis, P. 5364
Ferrando, R. 54
Ferrari, C. 10126
Ferrari, S. F. 3115, 9295
Ferraz, J. 7557
Ferrazzoli, P. 5207
Ferreira, C. A. C. 9594
Ferreira, G. W. S. 4160
Ferreira, M. C. 4160
Ferreira, P. B. D. 2147
Ferreira, S. M. 3211
Ferrer, A. 1107
Ferrera-Cerrato, R. 2239
Ferreres, F. 1232
Ferrett, M. 1249
Ferretti, M. 3026, 4718, 5951
Ferreyra, R. 7247

Ferrier, R. C. 3677
Ferriera, A. G. 870
Ferris, D. M. 6084
Ferris-Kaan, R. 4998, 6776
Ferriss, R. S. 4873
Ferry, O. 8535
Ferson, S. 1974
Fet, V. 5919
Fetcher, N. 276, 1075, 6292
Feucht, W. 433
Feugey, L. 4019
Feuillet, C. 7375, 7377
Few, D. V. 1815
Ffolliott, P. F. 4149, 7325, 7689
Fiala, B. 10027
Fiala, K. 7149
Fichter, J. 2856
Fiddler, G. O. 1756, 4329, 4343
Fiddler, T. 5508
Fidelibus, M. W. 6712
Fidgen, J. G. 7442
Fiedler, H. 6511
Fiedler, H. J. 6709
Fiegel, G. 1160
Field, C. B. 3318, 5199
Field, E. M. 9853
Field, J. S. 8084
Field, R. 5790
Field, R. J. 8638
Field, R. P. 5787-5789
Fielder, P. 6079
Fielding, N. 3184
Fife, D. N. 7752
Figaj, J. 7183
Fight, R. D. 5214
Figueiredo, E. 9910
Figueiredo, R. A. de 9881
Figueroa, J. 1938
Figueroa, L. I. de 9065
Figueroa, P. F. 1764
Fijałowski, D. 1337
Filek, G. 1609
Filgueiras, T. S. 7223
Filho, W. W. 9819
Filimonov, É. G. 4609
Filin, A. I. 1751
Filion, L. 1486, 3684, 5764
Filip, G. M. 607, 7201, 10008
Filip, V. 6648
Filippis, L. F. de 5073
Filiptschuk, A. N. 4167
Filius, A. M. 265
Filliatre, C. 3746
Fimbel, C. 1527, 3215
Fimbel, C. C. 8572
Fimbel, R. A. 8572, 9995
Finch-Savage, W. E. 3012, 3390, 3832
Finckenstein, B. von 9657
Find, J. I. 7745, 9445
Findeis, G. 2430
Finér, L. 407, 5396
Fineschi, S. 5554
Fingleton, J. S. 3354
Finkeldey, R. 5482, 7360
Finlay, R. D. 8283
Finney, J. A. 5785
Fins, L. 1274
Fiore, J. 778
Fiorella, M. 6223
Fiorentino, D. C. 2301
Fircks, H. A. von 1064, 8317
Fircks, Y. von 8047
Firdaus-e-Bareen 8253
Firrao, G. 5668, 5670
Firsova, V. P. 7970
Fischer, A. 6749
Fischer, B. 6341
Fischer, B. C. 147, 937
Fischer, C. R. 5271
Fischer, H. W. 8859
Fischer, J. C. von 9693
Fischer, M. 4960
Fischlin, A. 355, 3957
Fisher, B. L. 3100
Fisher, D. 5440
Fisher, J. B. 3730
Fisher, P. J. 5654
Fisher, R. F. 2558, 5051, 8390
Fithriadi, R. 2475
Fittler, J. 4879
Fitzgerald, H. 1506
Fitzgerald, R. W. 1856
Fitzgerald, T. 8456
Fitzgerald, T. D. 7449
Fitzjarrald, D. R. 8924
Fitzmaurice, R. L. 9189
Fitzpatrick, D. 4158
Fitzsimmons, M. J. 9942
Fjellstrom, R. G. 2223, 5529
Fjone, G. 10015
Flagler, R. B. 340, 3002
Flaherty, M. 8528
Flaig, H. 1285
Flammang, N. 7074
Flanagan, G. J. 7797
Flanagan, L. B. 3800, 7128, 9041
Flandez, M. S. 6106
Flannigan, M. D. 506, 2135
Flaten, T. P. 9692
Flavelle, A. 2758
Fleck, I. 9775
Fleischer, S. J. 5720
Fleming, R. A. 677, 796, 3843
Fleming, R. L. 3447, 4330, 6925
Fletcher, C. 1872
Fletcher, R. A. 1450
Fletcher, T. D. 2504
Flett, R. J. 3678
Fleurentin, J. 6954
Flewelling, J. 1888
Flewelling, J. W. 1617
Flick, W. A. 6855
Flinders, J. T. 6675
Flinn, B. S. 1220
Flinn, C. L. 8757
Flinn, D. W. 6119
Flint, M. L. 5783
Floate, K. D. 5754, 6594
Floc'h, É. le 8420
Flood, R. 5196
Flora, D. F. 732
Flore, J. A. 1267, 9027
Florence, R. G. 3059, 7272
Florentino, A. 5287
Flores, H. E. 5616
Flores Negrón, C. 6167
Floret, C. 8420, 9265
Floris, A. 6231, 8740
Florkowski, W. J. 6143, 9558
Floto, F. 7745, 9445
Flouzat, G. 9631
Flower-Ellis, J. 1610
Flower-Ellis, J. G. K. 4174, 8056
Floyd, A. G. 4996
Floyd, R. B. 2554, 4031
Flückiger, W. 5311, 5693, 7753
Fluet, M. 2801
Flygh, G. 3405
Flynt, R. D. 6677
Foahom, B. 9161
Fober, H. 1131-1132
Foerster, W. 1000
Fogal, W. H. 1318, 9870
Fogel, R. 3548
Foggo, A. 5707, 5748, 8334
Fogle, D. 1835
Fogle, D. B. 2031
Foissner, W. 136
Foletti, C. 4945
Foley, J. A. 507
Foley, M. E. 4683
Folgarait, P. J. 3716
Folk, R. S. 1723-1724, 1726, 4335
Follis, M. B. 4114
Foltz, J. L. 674
Fomina, O. A. 9769
Fomum, Z. T. 8911
Fong, D. R. 8005
Fons, J. 1102, 5307, 7889
Fonseca, C. R. 2296
Fonseca, N. 4160
Fontan, J. 4551
Fontanel, A. 1696
Fontelle, D. 3816
Fontenelle, G. B. 2038
Fontenla, S. 3019
Fontés, J. 9631
Fonturbel, M. T. 8883
Fonweban, J. N. 3458, 4594, 8701
Food and Agriculture Organization 8477
Food and Agriculture Organization, Forestry Department 9371
Food and Agriculture Organization, TFAP Coordinating Unit 8514, 9370
Foody, G. M. 1047, 2768, 3511, 6225, 9642
Fookes, C. J. R. 8075
Foord, S. H. 3211
Forbes, T. D. A. 9823
Forbrig, A. 1176
Forbus, J. K. 2912
Forcade, E. 1556
Force, J. E. 4425, 6142
Ford, W. M. 3196, 5827, 10059
Fordham, M. C. 4714
Foré, S. A. 3986
Forenza, D. 371
Forestry Chronicle 4172-4173
Forey, P. L. 5921
Forget, E. 3680
Forget, P. M. 6509, 6571
Forman, L. L. 8964
Forreiter, C. 1279
Forrester, R. I. 2118
Forseth, I. N. 6122
Forsius, M. 6333
Forslund, R. R. 6161
FORSPA Publication 2481
Forster, B. A. 7204
Förster, H. 7057
Förster, M. 9382
Forster, P. I. 2327, 3038, 8075
Forstreuter, M. 1882
Forsyth, G. G. 1193
Forsyth, P. G. 6639
Forte, L. 6546, 9957
Forti, M. C. 8419
Fortin, J. A. 4849
Fortin, J. P. 2753
Fortin, M. J. 5962, 6579
Fosberg, M. A. 3057
Foschi, P. G. 4447
Foster, D. R. 716-717, 2801
Foster, G. S. 28
Foster, H. A. 10023
Foster, N. W. 4142, 4490
Foster, R. B. 2272
Fouad Abbad 153
Foucard, J. C. 4144
Foucault, B. de 803
Fourgeres, D. 5737
Fournier, M. 2129, 3067, 4584, 4642, 5375
Fournier, R. A. 2753
Foutch, M. 5849
Fowke, L. C. 119, 1228, 5945, 7357, 7740
Fowler, D. 2008, 8868
Fowler, N. 4784
Fowler, P. A. 2434
Fownes, J. H. 6090, 6817, 7882, 9461
Fox, A. J. 5585
Fox, D. G. 3333
Fox, J. 2758
Fox, J. E. D. 3535
Fox, J. F. 8122
Fox, J. W. 7400
Foyer, C. H. 5543
Fraedrich, B. R. 3286
Fraedrich, S. W. 4016, 6927, 9089
Fraga López, F. 9773
Fraichard, A. 3764
Fralish, J. S. 3096
Frampton, C. M. 2010
Francardi, V. 9155-9156
France, Association pour la Recherche sur la Production Forestière et le Bois en Région Aquitaine 765
France, Ministère de l'Agriculture et de la Pêche 6845
Franche, C. 9994
Francis, J. K. 1336, 3383
Francisco, M. 4704
Franciscon, C. H. 9883
Francke, W. 9153
Francke Campaña, S. 1185, 1750
Franclet, A. 2591
Franco, A. A. 9070-9071
Franco, A. C. 2990
Franco, W. 4307
Franco Múgica, F. 8991
Frangi, J. L. 1066, 1309, 3081
Franich, R. A. 3754
Frank, D. 6739
Frank, H. 338, 1165
Franke, A. 9422
Franken, W. K. 8378
Frankenhuyzen, K. van 675, 5727, 7503, 7507, 8354
Frankie, G. W. 2928
Frankland, J. C. 4572
Franklin, J. F. 1333, 1572, 1995, 2793, 3459, 5347, 6853
Franklin, S. B. 3096
Franklin, S. E. 3512, 7838, 8731
Franks, P. J. 8806
Franz, F. 9082
Franzel, S. 8186
Fraser, J. D. 6685
Fraser, K. W. 298
Fraser, L. H. 9514
Fraser, R. G. 7497
Fraser, R. G 9125
Fratello, G. 8602
Fratepietro, G. 9646
Fratini, R. 3026
Frattegiani, M. 2406, 8626, 9079
Fraval, A. 9184
Fraver, S. 3874
Frazão, J. M. F. 7799
Frech, R. J. 4610
Fredericksen, T. S. 1061, 6425, 7985, 9680
Fredriksson, D. 9530
Freedman, B. 5829
Freeman, A. 1030
Freeman, C. E. 421
Freeman, J. D. 6124
Freemantle, J. 1342
Freer-Smith, P. H. 1154, 2854
Frehner, M. 6555
Frei Raj, S. 6762
Freire, S. 6456
Freist, H. 9545
Freitas, C. R. de 1413
Freitas, L. H. C. de 8074
Freitas, R. W. A. 8574
Frelich, L. E. 27, 3432, 4806, 9017
French, D. W. 3170
French, J. H. 760
French, J. R. 5827
French, N. H. F. 4450, 5202
French, S. 742
Frenzel, B. 6530
Frey, S. D. 5008
Friar, E. 5530
Fridley, J. L. 4977
Fried, M. 6307, 8500
Friedel, M. H. 3707
Friedland, A. J. 342, 1169-1170
Friedman, J. M. 3947, 6565, 8393
Friedrich, E. 3212
Frielinghaus, M. 7042
Friend, A. D. 2008
Friend, A. L. 1975, 1977, 9670
Friend, G. R. 8324
Fries, C. 9387, 9504
Fries, J. 1011
Friese, C. 8744
Frimmel, M. 720
Frioni, L. 1443
Frison, E. 8492
Frison, G. 6136
Frisullo, S. 2273
Fritig, B. 2087
Fritts, H. C. 7612

Fritz, R. 4747
Fritz, R. S. 5524, 7429
Fritze, H. 3570, 5273, 7939
Fritzlar, F. 2298
Frochot, H. 1740, 4689
Fröhlich, J. 8307
Fröhlich, M. 7774
Frohm, S. 5159
Frohne, D. 2445
Fromard, F. 1015
Fromm, J. 455
Frossard, J. S. 1257, 2487, 5069
Frost, P. 6369
Frost, P. G. H. 4802
Frostegård, Å. 7939
Frühwald, A. 4252
Frumhoff, P. C. 9296
Frusher, S. D. 7058
Fry, B. 9731
Fryer, G. I. 479
Fryer, J. H. 3355
Fryxell, J. M. 4904
Fuchigami, L. H. 7037
Fuchino, H. 9822
Fuchs, A. 1023
Fuchs, E. 8318
Fuchs, E. E. 1609
Fuchshuber, L. 7896
Fuentes, J. D. 1171
Fuertes, E. 1388
Fueyo, G. M. Del 8072
Fugro, P. A. 8303
Führ, F. 2858
Fuhrer, B. A. 5592
Führer, E. 2354, 2357, 5726
Fujieda, M. 9237
Fujii, T. 4625, 7173, 8906
Fujii, Y. 10157
Fujikake, I. 10132
Fujikawa, S. 2805, 8895
Fujimoto, K. 1777, 3911, 4360, 6824
Fujimoto, N. 9678
Fujimoto, S. 9016
Fujimura, T. 5515
Fujioka, K. 8690
Fujisawa, Y. 560, 4591, 6587, 6592, 9758
Fujita, M. 7658
Fujiwara, K. 5922
Fujiwara, M. 9603
Fujiwara, T. 4655
Fukazawa, C. 439
Fukazawa, K. 400, 2026, 2029, 6411-6412, 8891, 8895
Fukuda, A. 2666
Fukuda, K. 2372, 5774
Fukumoto, T. 4010
Fukushima, K. 3714
Fukuyama, K. 7481
Fukuzawa, K. 2026
Fulbright, D. W. 9108, 9110
Füldner, K. 9524
Fule, P. Z. 1191
Fuller, M. M. 2900
Fuller, P. F. 3426
Funada, R. 6411-6412, 8891
Fung, A. K. 9635
Fung, L. E. 2926
Funk, C. 6484, 8114
Furch, B. 1113
Furlan, M. 8101
Furley, P. A. 4165
Furmanowa, M. 8684
Furnier, G. R. 6489, 9977, 9997
Furniss, M. M. 8343
Furnival, G. M. 4218, 6956
Furrer, V. 2982, 5394
Fürst, P. 9046
Fürst, W. 6915
Furter, M. 8589
Furukoshi, T. 4965, 7364
Furuno, T. 1260, 2977, 4671, 4715, 7899
Furuta, K. 633, 4880, 4900, 7463
Furuya, T. 2578, 2580-2581
Fushitani, M. 7116
Fusi, F. 1038
Fusi, P. 435
Futai, K. 661, 8252, 8840
Fuwape, J. A. 3363
Fyles, J. W. 885-886, 2615, 2811, 4493, 5358
Gabbrielli, A. 806
Gabetta, B. 9800
Gabler, K. 2884
Gabriel, I. E. 1162, 8842
Gabriel Filho, A. 6277
Gabukova, V. V. 4306
Gachechiladze, N. D. 9812
Gaddanakeri, S. A. 2421
Gadek, P. A. 500, 3997
Gadow, K. von 7003, 9524, 9578, 9601, 9627
Gagnon, D. 5135, 5275, 5289
Gagnon, G. 3813
Gagnon, J. 908
Gagnon, R. 22
Gaillard, M. J. 17
Gaillard de Benitez, C. 790
Gaither, J. C., Jr. 6681
Gajardo, R. 6793
Gajdošová, A. 8191
Gakou, M. 6142
Gale, M. J. 7715
Gale, M. R. 4208
Galera, F. M. 1504
Galetti, M. 1518, 10067
Galetto, L. 8893
Galiana, A. 7389, 9069
Galinski, W. 2797, 2950
Galkin, G. I. 644
Gallagher, M. W. 333, 7987
Gallardo, A. 2821
Gallardo, F. 5505
Gallardo, J. F. 1824, 6291, 9699
Gallardo, N. R. 193
Gallardo, S. 7177
Gallego, H. A. 1824, 1933
Galler, V. 1886
Gallet, C. 3105, 3437, 5259
Gallet, J. P. 9127
Galliano, H. 3801
Gallo, K. P. 7851
Gallo, L. A. 2197
Gallo do Ferrari, J. Y. 790
Galvin, K. A. 4953
Galway, M. E. 5945
Gama, A. 8639
Gamage, N. 9442
Gambetta, A. 1492
Gambiza, J. 8156
Gámez, S. 1434
Gamon, J. A. 5199
Ganade, G. 3790
Ganauri Singh 5865
Gandolfo, C. 4989
Gandullo Gutiérrez, J. M. 9574
Ganeshaiah, K. N. 2944
Ganeshamurthy, A. N. 5865
Ganey, J. L. 4183
Gangopadhyay, M. 7240
Ganguly, S. 5779
Gannert, C. 793
Gannon, A. J. 5744
Gansert, D. 7185
Gansner, D. A. 3351
Ganter, M. A. 4977
Gantuz, M. 4555
Ganzhorn, J. U. 6268
Gao, B. C. 1857, 8737
Gao, C. B. 9058
Gao, L. C. 3267
Gao, N. Z. 7483
Gao, S. 9109
Gao, W. 9763
Gao, X. F. 2052
Gao, Y. 4669, 10156
Gáper, J. 5630
Gapihan, J. Y. 10113
Garau, A. M. 6306
Garay, A. A. 5538
Garbaye, J. 2228, 2248, 3820, 4640
Garbe, V. 6275
Garber, M. P. 1732
Garbutt, K. 3948
Garbutt, R. 9100
Garcez, W. S. 9836
García, A. 1086
García, B. 9
García, C. 7909
Garcia, M. C. 2766
García, O. 4205
Garcia, R. 6723
Garcia, R. L. 3003, 5226
Garcia, T. B. 587
García, X. 8237
García Antón, M. 8991
García del Barrio, J. M. 7817
García-Gutiérrez, A. 5505
García J., M. N. 784
García-Mijangos, I. 4772
García-Novo, F. 9922
García-Oliva, F. 4529
García-Viguera, C. 1232
Garden, G. 1999
Gärdenäs, A. I. 4516
Gardener, C. J. 9241
Gardezi, A. K. 2239
Gardin, L. 987
Gardiner, B. 6273
Gardiner, B. A. 6271-6272
Gardiner, J. J. 3114
Gardner, J. 7706
Gardner, M. F. 6758
Gardner, R. H. 1200
Gardner, S. D. L. 8755
Garfitt, J. E. 6778
Garg, V. K. 596
Gariboldi, P. 9800, 9806
Gariépy, M. 4097
Garkoti, S. C. 3633
Garland, M. R. 3500
Garman, S. L. 3483, 7539, 8365
Garnier, A. 5577, 8273
Garrec, J. P. 1172, 3808, 4473, 5325, 6443
Garrett, H. E. 4015, 5594, 9055
Garrison, B. A. 10065
Garrity, D. P. 4115, 8402
Garrity, S. D. 4575-4577, 6357
Garrod, G. D. 9374
Garrott, R. A. 3200
Garry, R. P. 8917
Garten, C. T., Jr. 2847, 3576
Garwood, N. C. 6581
Gasanova, Z. E. 1004
Gash, J. H. C. 7679
Gashev, S. N. 4950
Gaskin, J. E. 822
Gaskin, R. E. 4823, 4826, 7638
Gaspar, T. 1704, 3774, 7743, 8577, 9455
Gasperazzo, W. L. 5729
Gasson, P. 6415, 8906
Gasson, P. E. 8905
Gastaldo, P. 2055, 3470, 5089
Gastellu-Etchegorry, J. P. 6226, 9631
Gaston, G. G. 5209
Gates, A. 8456
Gatter, W. 10077
Gatto, F. del 9607
Gaud, W. S. 6672, 8359
Gaudreault, S. M. 8312
Gauld, J. H. 5353
Gault, R. R. 2241
Gauquelin, T. 1015
Gaur, R. 1488
Gaur, R. K. 5730
Gauslaa, Y. 8932
Gauthier, D. 8887
Gauthier, O. 1159
Gauthier, R. P. 7842
Gautier, D. 8530, 9396
Gautier-Hion, A. 4737, 9218
Gavilanes, M. L. 1367, 2147
Gavrikov, V. L. 9362
Gawroński, S. 1394
Gay, G. 2246, 4003, 5584, 8284
Gayathri, M. S. 7250
Gaydou, E. M. 9891
Gaynar, D. G. 7317
Gaywood, M. J. 3332
Gbadegesin, R. A. 9179
Gea, L. 5584
Gea, L. D. 835
Geary, P. W. 6119
Gebauer, G. 3823, 9721
Gebauer, U. 3212
Gebhardt, K. 5083, 7735
Gebre, G. M. 1121
Geburek, T. 2197, 4764, 9328
Gee, A. S. 8864
Geeske, J. 2951
Geetha, S. 1365
Gégout, J. C. 1362
Geh, S. Y. 10133
Gehring, C. A. 4014
Gehrmann, J. 8836
Géhu, J. M. 3927
Geiger, S. C. 1919, 3275
Geigert, M. A. 2871
Geils, B. W. 618
Geisinger, D. 5302
Geisler, H. 2669
Geldenhuys, C. J. 516, 2134, 3836
Gelder, B. van 5925
Gelhaye, D. 2863, 4302, 7074, 8943
Gell, P. A. 3336
Gellini, R. 2048, 3025, 4508, 6330
Gelpe, J. 3567
Gély, A. 5188
Gemma, J. N. 9080
Gemmel, P. 3315, 5624, 6919, 9529
Gemmell, F. M. 5203
Genderen, M. K. van 350
Gendraud, M. 5069
Généré, B. 4008, 9992
Genet, P. 5573
Geneve, R. L. 6396
Génova Fuster, M. 2441
Genova Fuster, M. M. 6766
Gentry, A. H. 3958, 5447
Genty, B. 4690
George, D. W. 147
George, M. W. 5088
George, R. J. 9246
Georgiev, G. T. 643
Gera, M. 8564
Gera, N. 8564
Gérard, J. 5573
Gerber, D. 5518
Gerchau, J. 2953
Gereau, R. E. 491
Gerecke, K. L. 1581
Gerémia, F. 4466
Gerhardt, K. 9530
Gerhold, H. D. 4986, 8294
Geri, C. 4667, 5765
Geri, P. C. 627
Gericke, K. L. 7702
Gerischer, G. F. R. 2552
Germany, Biologische Bundesanstalt für Land- und Forstwirtschaft 5673
Germany, Bundesministerium für Ernährung, Landwirtschaft und Forsten 4439, 5975, 6505
Geroge, M. 2448
Gerold, D. 4164
Geron, C. D. 8011
Gerry, A. K. 8988
Gerson, U. 7443
Gertner, G. 6192
Gertner, G. Z. 5939
Gerttula, S. M. 5493
Gervais, C. 2222
Gerwing, J. J. 6559
Gess, R. W. 8148
Gessel, S. P. 3628, 7053
Gessler, M. C. 5166
Getar, E. 5943
Geyer, W. A. 834, 2668, 4344, 5059, 8644
Ghani, A. K. M. O. 6045
Gharadjedaghi, B. 10042
Gharzouli, R. 3927
Ghatge, R. D. 186
Ghazanfar, S. A. 3295, 7252
Ghent, A. W. 7154
Gherardi, L. 6232
Gherbi, H. 9994
Ghersa, C. M. 6306
Ghimire, K. B. 4103
Ghisalberti, E. L. 192, 3472, 3753
Ghisi, R. 458

Ghitter, G. 8731
Gholz, H. L. 3005, 4695, 5412, 6465, 6797
Ghosh, A. 7802
Ghosh, A. K. 388
Ghosh, M. K. 6316
Ghosh, S. 8118, 9624
Ghulam Hussain 2559
Gianinazzi, S. 5593
Gianinazzi-Pearson, V. 5593
Giannasi, D. E. 3987
Giannini, R. 2191, 5424, 5511, 8227
Giathi, G. 1479
Giba, Z. 855
Gibas, S. 7431
Gibbon, H. J. 5896
Gibbs, J. 3164, 5633
Gibbs, J. N. 2270
Gibbs, J. P. 1515
Gibbs, P. E. 3027
Gibson, A. 3765, 8806
Gibson, D. M. 9331
Gibson, G. L. 6866
Gibson, N. 7707
Gibson, R. 7709
Gibson, T. 1671
Giddins, R. L. 7058
Giefing, D. F. 6130
Gier, A. de 6216
Giertych, M. 828-830, 2179, 6030
Giertych, M. J. 7086, 7189
Giesemann, A. 7965
Giesler, R. 344
Giessman, N. F. 4370
Gietl, G. 9405
Gifford, D. J. 2576, 6471, 8113
Gignoux, J. 2511
Gijsbers, R. 5020
Gijzen, M. 452
Gil, L. 7719
Gilbert, G. S. 2272
Gilbert, I. R. 7381
Gilbert, J. M. 9543
Giles, R. H., Jr. 7544
Gilfedder, L. 10128
Gill, A. M. 372, 2917, 3330, 3697
Gill, J. 1999
Gill, L. S. 2568
Gill, R. I. S. 2606
Gill, S. 4897
Gill, S. A. 2374, 4876, 6665
Gill, S. S. 2606
Giller, K. E. 1939, 8263
Gillespie, A. J. R. 2713, 3122, 5800
Gillespie, A. R. 2011, 7843, 9496
Gillespie, R. T. 3512, 7838
Gillespie, T. J. 1171, 6262
Gilless, J. K. 1870
Gillham, M. C. 5690
Gilliam, C. H. 7734, 8457-8458
Gillieson, D. S. 7286
Gillis, M. 8266, 9071
Gillis, M. D. 6995
Gillon, D. 295, 7916
Gilly, S. P. 3171, 5057
Gilman, E. F. 2434, 3285
Gilman, E. R. 1733
Gil'manov, T. G. 6449
Gilmore, D. W. 1842, 5370
Gilmour, D. 7592
Gilmour, D. A. 4166
Giménez, M. J. 6442
Giménez F., S. N. 6024
Gimingham, C. H. 3931
Gimon, M. E. 1812
Ginsberg, K. A. 1069
Gintings, A. N. 2475
Gintovt, I. A. 1541
Ginwal, H. S. 617, 8564
Gin'ya, H. 8095
Gioda, A. 7295
Giollant, M. 5572
Giordano, A. 708, 9239
Giordano, E. 1320
Giordano, G. 6226
Giorgi, R. 2632
Giovaninetti, G. 6604
Giovinazzo, M. 1467
Girach, R. D. 199, 8687
Girardin, C. 5240
Giraut, P. 9202
Giridhar, J. 6608
Girijesh, G. K. 4100, 8678
Giron, G. 7362
Gitelson, A. 2996, 5410
Giunta, R. R. 1087
Giusto, F. di. 8244
Given, D. R. 5918
Gizyn, W. I. 1991
Gjedtjernet, A. M. F. 9553
Gjerstad, D. H. 166, 1771
Gjuleva, V. 5084
Gladkova, G. A. 8941
Glahn, J. F. 6677
Glass, A. D. M. 9727-9729
Glassy, J. M. 1341
Glatzel, G. 5309, 7754
Glavac, V. 1134
Glawischnig, T. D. 4668
Glazunova, E. M. 9812
Gleizes, M. 8928
Glen, H. F. 9900
Glenn, M. G. 2138
Glerum, C. 9842
Glew, R. H. 7176
Gleye, J. 8914
Glover, G. R. 166, 1771
Głowacka, B. 7499
Głowacki, S. 1984
Glowalla, H. 4362
Głowniak, K. 8684
Glumac, E. G. 2696
Glynn, C. 5772
Glyzin, A. V. 4992
Gnauk, T. 4708
Gninenko, Yu. I. 10034
Gobran, G. R. 3572, 7919
Gobster, P. H. 6754
Godard, D. 4690
Godbey, A. P. 7737
Godbold, D. L. 1290, 1593, 7920, 8793
Godbout, C. 4849
Godde, D. 1291
Godfray, H. C. J. 7445, 7460
Godfrey, M. J. S. 2010
Godoy, R. 1644
Goel, A. K. 580
Goelz, J. C. G. 9575
Goerttler, T. 6314
Goessling, B. 5454
Goetz, A. F. H. 1857, 8737
Goetze, D. C. 4310, 6080
Goeyens, L. 4676
Goff, N. le 4153, 6186
Goffner, D. 4678
Gogala, N. 2249
Goh, K. C. 4095
Goheen, D. J. 4856, 10008
Gold, A. J. 2890
Gold, M. A. 2419-2420, 2621, 9027, 9276, 10105
Goldberg, R. 3757
Goldman, M. B. 5359
Goldrick, G. 46
Goldsack, G. 415
Goldsack, R. J. 415, 8075
Goldstein, G. 2999, 3601, 3614, 5283, 6302
Goldstein, R. 1974
Golovikhin, I. V. 8715
Goltz, S. M. 1284
Golubev, V. E. 5195
Golubović, U. 4459, 4719
Gombya-Ssembajjwe, W. 8414
Gomes, N. C. 5611
Gomes, O. S. 5802
Gomes da Silva Junior, F. 6430
Gómez, A. 1242
Gomez, I. A. 1201
Gómez de Aizpurua, C. 8332
Gómez Gutiérnez, D. J. 1561
Gómez-Laurito, J. 3850
Gómez Martínez, D. 5979
Gömörová, E. 6979
Gömöry, D. 561, 581, 6979
Gonçalves, A. N. 8281
Goncharenko, G. G. 571, 5514, 7342, 7347, 9044
Gondo, P. 7846
Gondran, M. 9128
Gong, M. 485
Gong, P. 1342
Gong, P. C. 1019
Gong, W. K. 6427
Gonkhalekar, S. B. 8303
Gönna, M. A. von der 7855
Gonzales, L. L. 9563
González, A. 950
Gonzalez, A. 6082-6083
González, A. G. 4744
González, C. 3914, 5549
González, J. 1236, 6456
González, J. E. 5051
González, L. 4951, 7313, 7315
González, M. L. 3727
González, R. 3727
González, R. S. 4433
González-Abreu, A. 1086
González Adrados, J. R. 7800
González Alonso, F. 6241, 6751
González Artiles, F. J. 6032
González-Benito, M. E. 117
González Cangas, M. 2660
González Cascón, M. R. 8377
González Doncel, I. 5961
González-Garcia, L. 473
González Martin, M. 6032
Gonzalez Minero, F. J. 3069
González Parra, J. 8035
González-Prieto, S. J. 8081
Good, E. 34
Goodwin, C. 1981
Gopal, S. 4444
Gopal Misra 4375
Gopalakrishnan, S. 9568, 9682
Gopi, K. C. 2300
Gopichadran, R. 628
Gopikumar, K. 7729, 9057, 9438
Gopinath, K. 641
Gopius, Yu. A. 7155
Gora, V. 5685
Gorai, T. 4054
Göransson, A. 324, 1148
Gorbunov, E. A. 965, 2667
Gordon, A. G. 2562, 9045
Gordon, A. M. 1591, 1753, 3692, 9275, 9277-9278, 9487
Gordon, C. A. 3544, 3650
Gordon, M. P. 2214
Gordon, R. 7506
Gordon, T. R. 5645
Goreux, A. 1700
Gorian, F. 6058
Gorissen, A. 1142, 1972, 4296, 4474, 5312
Görlitz, E. 6121
Gorman, T. M. 8541
Gornall, R. J. 8957
Goroshkevich, S. N. 3728
Görres, J. 5242
Gorshkov, V. V. 8170
Gorsira, B. 3231
Gorunovic, M. S. 6437, 8917
Goryainova, V. P. 1920
Gosalbez, J. 10060
Gosler, A. G. 2960
Gosling, P. 1684
Gosling, P. G. 73, 3384
Gösswald, K. 8323
Goswami, A. 1734
Göthe, L. 9458
Gotoh, T. 9178
Gotou, J. 4369
Gottesfeld, L. M. J. 374
Gottfried, G. J. 7325, 7689
Gottfried, R. R. 6852
Göttlein, A. 997, 4589
Gottlieb, H. E. 6629
Gottlieb, O. R. 8912, 9836, 9839
Gottsberger, G. 8498
Gottschalk, K. W. 2014, 8331
Goudie, J. W. 230
Goulart, M. O. F. 9838
Gould, A. B. 4868
Gould, J. R. 5796
Gould, J. S. 2497
Goulden, M. L. 313, 3318, 3328, 5199, 8924
Goulding, C. J. 4225
Goulding, K. 7683
Goulet, F. 4482
Gourbiere, F. 6283
Gourlay, A. H. 8636
Gourlay, I. D. 396
Goussard, F. 627
Gove, J. H. 9580
Gover, R. K. 6743
Govi, G. 6606
Gow, D. D. 1012
Goward, S. N. 1043, 1339, 1347, 4174, 5206
Gowen, M. M. 6790
Gower, S. T. 5009, 5412, 7076
Goyal, S. 5264
Goze, S. 3516
Graaf, S. van der 1547
Graber, D. 6628
Grabinsky, J. 4982
Grace, J. 2807, 2841, 3010, 4518, 5222, 6890, 7146, 8014
Grace, J. C. 3710
Grace, J. K. 9137
Grace, L. 5503
Grace, S. L. 4754
Gracia, C. 2840
Gracia, C. A. 3752, 7957
Graczyk, A. 1956, 1959
Gradi, A. 143
Grafström, E. 9796
Graham, A. 6533
Graham, A. D. N. 308
Graham, A. W. 2132, 2798
Graham, J. S. 3794
Graham, L. A. 6236
Graham, R. C. 5360, 7918
Graham, R. L. 6240
Graham, S. A. 3995
Granat, L. 7991
Granata, G. 9104
Granberg, H. B. 3428
Grancea, F. 2567
Grandi, G. F. de 3515
Grandjanny, M. 4317
Grandjean, G. 5124
Grandtner, M. M. 3922
Graney, D. L. 2712
Granger, J. E. 7301
Granger, L. 3635
Granier, A. 700-701, 2081, 4511-4512, 4523, 5279, 6907, 7066, 7648, 7951-7952
Grannemann, H. 2669
Grant, J. 8743
Granville, J. J. de 7620
Gratani, L. 781
Grattapaglia, D. 1440, 5555, 8248
Gratton, D. J. 2752-2753
Graudal, L. 8187
Graumlich, L. J. 4806
Graves, W. R. 1707, 5288, 6608, 6929, 10150
Gravier, M. 7296
Gray, A. N. 9688
Gray, D. R. 5721, 9151
Gray, T. 5797
Grayer, R. J. 203
Grayson, A. J. 7597, 8515
Grear, J. S. 1074
Greaves, B. L. 6222
Green, M. 2969
Green, S. R. 8014
Green, T. H. 166
Greenberg, C. H. 4920, 5469, 9213
Greene, D. F. 3845, 9886
Greene, T. A. 1457
Greene, W. D. 4367
Greener, A. 6656
Greenland, D. 2466, 8754
Greenwood, E. A. N. 711
Greenwood, M. 9847
Greenwood, M. S. 5068, 5370, 9042, 9785-9786, 9848
Greenwood, R. 1643
Greer, D. H. 8762

Greer, J. D. 6236
Gref, R. 3682
Gregersen, H. 4101
Gregersen, H. M. 4149
Gregoire, C. 3509
Grégoire, J. C. 5748, 9185
Gregoire, T. G. 2927, 3167, 6214, 6956, 7676, 8505, 8509, 9348
Gregor, J. 7144, 7273
Gregorius, H. R. 2219, 5552
Gregory, K. J. 4086
Gregory, M. 762
Gregory, S. C. 2263
Greig, B. J. W. 9099
Greitner, C. S. 3023
Greller, A. M. 1373-1374
Grennfelt, P. 1950
Gresham, C. A. 1079
Greslier, N. 9928
Gressel, N. 5257
Grewal, H. 9588
Grewal, S. S. 699, 727, 5875
Grice, A. C. 3955
Gries, G. 5705
Gries, R. 5705
Griese, F. 9956
Grieve, I. C. 2906
Griffin, A. R. 5065, 5527
Griffin, B. J. 6466
Griffin, D. 728
Griffin, K. L. 4696, 5199, 7075
Griffin, N. J. 4804
Griffith, M. B. 8781
Griffiths, H. 2998, 4714, 7670
Griffiths, H. M. 5672, 7408
Grigal, D. F. 1839, 4781, 5235, 6315
Grigelmo Esteban, C. 1807
Grigera, D. 2104
Grigliatti, T. A. 7455
Grignetti, A. 8935
Gril, J. 4635
Grill, D. 4727, 4836, 6584
Grillas, P. 9236
Grilli Caiola, M. 4842
Grima-Pettenati, J. 7375
Grimaldi, M. 1899
Grimble, R. J. 8518
Grime, G. W. 396
Grime, J. P. 2575
Grimes, A. 2782
Grimm, C. 4039
Grimm, E. C. 513
Grip, H. 2908-2909
Grishin, Yu. M. 934
Grob, J. A. 780
Grodzińska, K. 2873
Groenenberg, J. E. 7978
Groenendijk, J. J. 6986
Groenewald, W. H. 183
Groeschl, D. A. 381
Groffman, P. M. 306, 2890, 5359
Grogan, H. M. 8279
Grollinger, Y. 8517
Gromtsev, A. N. 5195, 8027
Gronikowska, G. 7084
Groninger, J. W. 942, 1392
Gronow, C. J. V. 8729
Grönroos, R. 3133, 3405
Grønstad, B. S. 3378, 3829
Groof, H. de 3515
Groom, G. B. 3519
Groot, A. 1555, 4332
Groot, P. de 3843, 5677, 6667, 9186
Groot, W. 7439
Groover, A. 5508
Groover, A. T. 8208
Groppali, R. 6702
Grosclaude, C. 8290
Grosjean, S. 7930
Grosman, D. M. 5736
Gross, G. 8468
Gross, K. 9754
Gross, P. 1928, 6470
Grosse W., H. 955, 992, 5989
Grosskopf, E. 4566
Grossman, G. H. 4229
Grossmann, C. M. 1562
Grossnickle, S. C. 1723-1724, 1726-1728, 3565, 4335
Grosso, B. 4648
Grossoni, P. 3025, 8837
Grostal, P. 622
Grove, J. M. 1588
Grove, R. 4995
Grove, T. S. 901, 5609, 6780
Grover, D. R. 4052
Groves, R. H. 2451
Growns, I. O. 3679
Grubb, P. J. 2943, 3875, 4543, 9882
Grubbs, S. A. 7898
Gruber, F. 411, 1593, 2512, 7163, 9865
Grubešić, M. 4926
Grubišić, D. 855, 3721
Grulke, N. E. 2068
Grunder, J. M. 7501
Grundy, I. M. 195, 4802, 6960
Grunewald, F. 7570
Grünig, A. 6781
Grzin, J. 2695
Grzybowski, J. A. 4925
Gu, M. B. 10026
Guardo, A. di 1978
Guarim, V. L. M. S. 8995
Guarnaschelli, A. B. 6306
Guay, R. 22
Guderian, R. 334, 4549
Gudmandsen, P. 3514
Guedes, R. N. C. 5802
Guehl, J. M. 1928, 2070, 3809, 4506, 4689, 6470
Guenther, A. 3741
Guenther, A. B. 4681, 8011
Guérin, G. 5869
Guerra, C. 1458
Guerra, J. 1195
Guerra, M. P. 4279
Guerri, F. S. 2685
Guerriero, L. 5207
Guest, R. 2429
Guevara, J. C. 1383
Guevara, S. 6736
Guevin, T. G. 1699
Guèye, I. 3340
Gueye, M. 9725
Guggenberger, G. 289
Gugić, G. 3268
Guglielmo, C. G. 9207
Guha, R. 819
Guhathakurta, P. 51
Guibert, B. 7538
Guicherd, P. 4515
Guidi, G. 8658, 8665
Guido, M. A. 5912
Guilbert, E. 7419
Guillard, J. 929
Guillaumin, D. 5757
Guillén, D. F. 3705
Guillot, J. 5572
Guimarães, E. M. 6153
Guimarães, I. 116
Guinet, H. 393
Guinko, S. 967, 7414-7415
Guiot, J. 2125
Guitard, D. 4584
Guittet, J. 4401, 8700
Guitton, J. L. 5867, 5876, 5883, 5888, 7580
Guldin, J. M. 3490
Gullberg, U. 4838, 9416
Gullo, M. A. lo 3613, 7068
Gumaste, S. K. 2421, 10114
Gumbie, C. 7121
Gumbie, C. M. 557
Gunatilleke, C. V. S. 921, 935, 1374, 1579, 5899
Gunatilleke, I. A. U. N. 921, 935, 1374, 1579, 5425, 5899
Gundermann, E. 4235, 7533, 9401
Gundersen, P. 330, 1951, 2866, 5244, 5323, 7650, 7819, 8001
Gunderson, C. A. 1283
Gunn, B. V. 3990, 5433
Gunn, C. R. 8977
Gunneberg, B. 4462
Günster, A. 6697
Gunston, H. M. 8870
Gunter, L. E. 3987
Günthardt-Goerg, M. S. 336, 2495, 2879, 5220, 6191
Günther, K. P. 1036
Gunton, T. 1872
Guo, L. B. 4394
Guo, Z. X. 7373
Guozhong, T. 5669
Gupta, B. N. 3246, 4313-4314, 4972, 7385
Gupta, G. N. 131, 3421, 5173, 8630, 9468
Gupta, J. P. 3274
Gupta, M. K. 2815
Gupta, M. P. 200, 8688
Gupta, P. K. 6782
Gupta, R. K. 6773, 7561, 8387
Gupta, S. 2598
Gupta, V. K. 2255, 8297
Gurib-Fakim, A. 6440
Guries, R. P. 4018, 5541, 5565, 8306, 9120
Gurmel Singh 2395
Gurumurti, K. 2448
Gururaja Rao, M. R. 9559
Gurusubramanian, G. 628
Gur'yanova, T. M. 4885, 10050
Gusmailina 2058
Gussarsson, M. 4501, 7056, 7971
Gussone, H. A. 9499
Gustafson, E. J. 6911
Gustafsson, L. 4126, 5942, 8168
Gustafsson, P. 5516, 8219-8220
Gut, L. J. 5771
Guthery, F. S. 6671
Guthrie, J. E. 2861
Gutiérrez, E. 1592
Gutiérrez, M. V. 6302
Gutiérrez C., B. 6028
Gutiérrez Caro, B. 1435
Gutiérrez Mañero, F. J. 1923
Guttenberger, H. 4836, 6584
Guttenberger, J. 4933
Guttenberger, M. 3007, 7393
Guttman, S. I. 3986
Guy, R. D. 5478, 6080
Guyette, R. P. 4141, 8029
Guynn, D., Jr. 3528
Guyon, A. 9929
Guyon, D. 3810
Guyon, J. P. 3810
Guzmán-Grajales, S. 6292
Guzmán-Grajales, S. M. 1077
Guzman-Plazola, R. A. 2239
Gyalistras, D. 3957
Gyanendra Kumar 2021
Gyokusen, K. 4468, 6970, 7186
Gytarsky, M. L. 5332
Gyulai, G. 876
Haack, R. A. 7470
Haag, H. P. 316
Haag-Kerwer, A. 2990
Haapala, H. 8843
Haapala, T. 6054, 7379
Haapanen, M. 7674, 7731, 9973
Haas, J. 160
Haase, A. 3601
Haase, D. L. 1725, 5014
Haase, P. 562, 584, 2212, 7823
Haase, R. 7823
Haase, S. 7605
Habeck, F. von 3902
Häberle, K. H. 9687
Häberle, S. 30
Habermehl, A. 7067
Habib, M. A. 1001, 6173, 6975
Habib, R. 3637
Håbjørg, A. 5330
Habte, M. 2250, 4012, 5612
Hacker, J. M. 7844
Hacker, W. D. 2867, 5179, 9744
Hackett, W. P. 6489
Haddad, Y. 5393
Hadengganan, S. 7770
Hadfield, B. 7706
Hadi, A. H. A. 3846
Hadi, T. S. 7781
Hadley, K. S. 3291
Hadley, M. 4125
Haemig, P. D. 5828
Haeupler, H. von 3923
Hafeez, F. Y. 3150
Hafeez, S. M. 6014, 6724
Hafeezullah, M. 6724
Hafner, J. A. 5889
Hagborg, L. 5890
Hagedorn, S. F. 2553
Hagemeyer, J. 2955, 2976, 6343, 6457-6458, 7653, 9843
Hagen, K. S. 5691, 7509
Hagen, O. von dem 8521
Hagenberg, K. 4435
Hager, A. 447, 8258
Hagg, C. 2079
Haggar, J. P. 4107
Häggman, H. 4833, 5404
Häggman, H. M. 2942
Hagihara, A. 1271, 4187, 8707
Hagner, M. 10054
Hagner, S. 6106
Hahn, J. T. 2727, 4437
Hahn, R. 4233
Hahn-Schilling, B. 2698, 6207, 8606
Haibara, K. 1094, 1533, 4487, 4599
Haider, W. 4377
Haïdour, A. 5400
Haight, R. G. 2728, 7526
Hailes, K. J. 5354
Haim, A. 1196
Hain, F. P. 5686-5687, 5784, 9194
Hainard, P. 6398-6399
Haines, J. 9055
Haines, P. J. 9270
Haines, R. 5474
Haines, R. J. 75, 3356
Haines, T. A. 3574
Haines, T. K. 1873
Haire, D. 4936
Hairston, A. B. 5235
Haissig, B. E. 6605
Haith, D. A. 3420
Haitsuka, S. 7493
Hajek, A. E. 2336
Hajela, N. 1456
Hajela, R. K. 1456
Håkansson, I. 5873
Hakes, W. 3327
Hakulinen, J. 6317
Hale, P. E. 3196, 5827, 10059
Halik, S. 9180
Halko, L. 407
Hall, D. O. 4106
Hall, G. M. J. 3909
Hall, J. B. 9897
Hall, J. P. 9739, 9866
Hall, L. D. 5011
Hall, P. 3139, 6117
Hall, R. B. 2207, 2648
Hall, R. J. 258
Hall, R. L. 8870
Hallaksela, A. M. 2259, 9088
Halldin, S. 2905, 3604
Hällgren, J. E. 2831, 6480, 7646, 7648
Hallgren, S. W. 5285, 6084, 7072
Hallikainen, M. 3517
Hallingbäck, T. 4126
Hallonborg, U. 5157
Hallsby, G. 8872
Halpern, C. B. 3542
Halpern, S. L. 10052
Halsey, L. A. 7871
Halteman, W. A. 5370
Halter, M. R. 2046
Haluk, J. P. 6461
Halverson, J. A. 2333
Ham, D. L. 7784
Ham, R. W. J. M. van der 8964
Hamabata, E. 6267
Hamacher, J. 2290
Hamanishi, C. M. 8541
Hambuckers, A. 4082
Hamburg, S. P. 3621, 4195
Hamburger, M. 9798
Hamburger, M. O. 200

Häme, T. 3517
Hamel, M. 5750
Hamelin, R. C. 2274, 4873
Hämeri, K. 5324, 6351
Hamerlynck, E. 2991
Hamerlynck, E. P. 3791
Hamersma, B. 6041
Hämet-Ahti, L. 498
Hamilton, D. A., Jr. 3337
Hamilton, L. S. 4148
Hamilton, P. S. 1648
Hamilton, R. D. 5704
Hamilton, R. W. 5745
Hamm, P. B. 9097
Hammatt, N. 2608, 5593
Hammer, M. F. 2088
Hammitt, W. E. 2427
Hammond, S. C. 2895
Hampp, R. 2072, 3007, 3016, 7393, 9073
Hamrick, J. L. 7358
Hamzah, A. 7730
Han, H. 3773
Han, H. C. 3516, 3520
Han, J. S. 604
Han, S. F. 2235
Han, S. U. 8203, 8206
Han, Y. 614
Han, Y. C. 6871, 7721
Hanamashetti, S. I. 10114
Hanan, N. P. 3546
Hanaoka, J. 7658
Hance, B. A. 9437
Handayanto, E. 1939
Handley, L. W. 7737
Hånell, B. 3559, 9484, 9541
Haney, E. 2762
Haney, H. L., Jr. 2531, 6856
Hanhijärvi, A. 7359
Hanhimäki, S. 4029, 7427
Hanks, L. M. 5762, 7500, 8344
Hanley, T. A. 4910
Hanlon, C. C. 5758
Hannah, P. R. 146
Hannerz, M. 7872, 9484, 9488, 9675
Hänninen, H. 1262, 5231, 7040, 7865, 9360
Hänninen, O. 23
Hannon, G. 509
Hanover, J. W. 1267, 2076-2078, 2211
Hanowski, J. M. 4924
Hanrahan, M. 8445
Hansen, A. J. 3483, 8365
Hansen, B. C. S. 513, 8146
Hansen, C. P. 6210
Hansen, E. M. 7459
Hansen, H. 10025
Hansen, J. 3006
Hansen, J. E. 4805
Hansen, J. M. 9663
Hansen, K. 2866, 7819, 8001
Hansen, L. D. 3014
Hansen, L. O. 2346
Hansen, L. P. 4370
Hansen, M. H. 2727
Hansen, R. C. 4308
Hansen, U. 1292
Hanso, M. 5397
Hanson, G. C. 2890
Hanson, J. B. 2303
Hanson, P. J. 1963, 4703, 5356, 5406, 6475, 8852
Hansson, L. 4055, 5810
Hansson, P. 4867
Hao, H. 10009
Hapla, F. 989
Haque, M. A. 6045
Haque, M. E. 9816
Hara, H. 9157
Hara, T. 4798
Harada, K. 6603
Harada, N. 7616
Harahap, R. M. S. 6188
Harald, T. 6722
Harbagung 1828-1829, 1832-1833
Harborne, J. B. 203
Harcombe, P. A. 2696
Hardaha, S. 6156
Hardi, T. 1502
Hardie, I. W. 5986
Hardin, E. D. 3070
Hardin, M. R. 4899
Harding, R. B. 2618
Hardwinarto, S. 5123, 5839
Hardy, G. E. St. J. 5609
Harestad, A. S. 6783
Harfouche, A. 9970-9971
Hargrove, W. W. 1200
Hari, P. 1955, 2886, 5324, 6351, 7146, 8058
Harigovindan, R. 6305
Harisetijono 6149
Harju, A. 6678
Harkness, D. D. 4534
Härkönen, S. 7519
Harlan, T. 9313
Harley, M. M. 8964
Harley, P. C. 4681
Härmälä, L. 2985
Harman, H. M. 8647
Harmand, J. M. 4952
Harmer, R. 2625, 3031, 3424, 4750, 5374, 5440, 7998
Harmon, M. E. 1081, 3542, 4497, 7071, 7897
Harms, K. E. 7458
Harms, U. 3786
Harms, W. R. 947
Harnden, V. D. 7060
Harper, B. M. 7661
Harrell, M. O. 4046, 9189
Harrell, P. 4450
Harrilchak, M. A. 6754
Harriman, R. 3677
Harrington, C. A. 1006, 1823, 9869
Harrington, G. N. 6513
Harrington, R. A. 6090
Harrington, T. B. 4356
Harris, E. 6091
Harris, J. R. 5286, 5907, 6390, 6755
Harris, L. D. 4920, 5469, 9213
Harris, M. 9313
Harris, P. J. C. 1667, 1694, 1883, 5099, 9050
Harris, R. 5908
Harris, S. 2064, 10073
Harris, S. A. 590, 2224
Harris, W. 499, 2131, 5918
Harrison, A. F. 4534, 5327
Harrison, R. 896
Harrison, R. B. 894, 896, 3406
Harrod, R. J. 501
Harry, D. E. 4263, 5475
Harry, I. S. 1701, 4291, 5066, 7747
Hart, C. A. 3467
Hart, D. M. 7051
Hart, J. B., Jr. 3416
Hart, J. H. 4866
Hart, S. C. 327
Harte, M. J. 7835
Hartingh-Boca, G. de 4125
Hartley, A. E. 5199
Hartley, S. E. 2320
Hartley, T. G. 7231
Härtling, S. 6337, 6355
Hartman, J. M. 5453
Hartman, J. R. 8314
Hartmann, G. 10048
Hartog, G. den 6262
Hartoyo 2058
Hartung, W. 2083
Harvey, F. J. 4476, 9412
Harvey, S. 6740, 6947
Harvie, P. 3981
Harward, V. J. 4444
Harwood, C. E. 2462
Harwood, R. R. 8491
Hasan, O. 3768, 4734
Hasegawa, K. 1992
Hasegawa, M. 4044, 8799
Haseler, M. 6692
Haseler, M. E. 7532
Hasenauer, H. 795, 7652
Hashimoto, R. 1782, 3316, 6255, 6970
Hashimoto, Y. 428
Hashitani, T. 7999
Hashizume, H. 3773, 9879
Hasko, A. 6609
Hassall, R. B. 2694
Hassan, I. 10153
Hassan, R. 6720
Hassinen, A. 7033
Hasson, O. 7443
Hastings, F. L. 5784, 9194
Hastings, S. M. 2917
Hata, K. 5537, 8252
Hatch, M. W. 6495
Hatchell, G. E. 910
Hatcher, P. E. 9146
Hatcher, R. L. 5212
Hattemer, H. H. 2190, 5535, 6582, 9987
Hatton, T. J. 6300, 6813, 7667
Hattori, M. 6953, 8688
Hattori, S. 3600, 4491
Hattori, Y. 1151, 4547, 4585
Haug, G. 3378, 3829, 9878
Haug, I. 3158
Haugen, D. A. 6660
Haugen, J. 8932
Hauk, H. 5334, 6342
Haukioja, E. 2361, 2959, 4029, 4886, 7427, 9153
Haukoja, E. 8892
Haumann, J. 7197
Hauser, T. 3962
Hausman, J. F. 1704, 3774, 9455
Hausmann, B. 2354, 2357
Hausner, G. 6518
Hautala, E. L. 348
Havas, P. 966, 6494
Havel, L. 4279
Haveraaen, O. 6804, 6804
Haveren, B. P. van 3230
Havranek, W. M. 2885, 7099, 7187
Havrylenko, M. 3019
Hawke, M. F. 4958
Hawkins, B. J. 1083, 1294, 8820
Hawkins, C. 9508
Hawkins, S. W. 460
Hawksworth, F. G. 618
Hawley, G. J. 6586
Haworth, K. 1184
Hawthorne, B. T. 8296
Hawthorne, W. D. 8881
Hay, D. 8410
Hay, I. 6591
Hay, J. D. 9880
Hayashi, H. 7175
Hayashi, M. 7434
Hayashi, S. 1896, 4600, 5383
Hayashi, T. 4701, 9336, 9834
Haydu, J. 6756
Haye, A. J. 8818
Hayes, J. L. 655
Haymond, J. L. 4246
Haynes, B. E. 7076
Hayward, G. D. 9224
Hayward, P. H. 9224
Haywood, J. D. 2097, 2649, 2703, 3444, 3446, 3449, 4024, 6125
Hazenberg, G. 1182, 6395
Hazlett, P. W. 4490
He, C. H. 9807
He, F. 8159
He, F. G. 4767
He, F. L. 8159
He, L. F. 2019
He, L. M. 1914, 2400
He, Q. T. 8161
He, S. A. 7614
He, S. Y. 3235
He, Z. X. 2545
Head, J. 2132
Headley, D. 3287
Heady, R. D. 2025
Healey, J. R. 1891
Healy, W. M. 1524
Heathcott, M. 8731
Heatley, R. C. 5910
Hebard, F. V. 5545
Hebb, D. M. 2241
Heber, U. 2084, 5315
Heberle-Bors, E. 5542
Hébert, C. 4477
Hébert, J. 4432
Hebert, P. D. N. 7436
Hecke, P. van 6959, 8700
Hedberg, I. 1596
Hedden, R. L. 1061, 5728, 9680, 10056
Hedenström, E. 7504
Hedin, I. B. 5160
Hedin, K. 1627
Hedin, L. O. 5296
Heenan, P. B. 2131
Heering, J. H. 9560
Heermans, J. 1011
Hees, A. F. M. van 797
Hefty, G. J. 4437
Hegazy, A. K. 1360, 8162
Hegde, N. G. 14
Hegde, R. K. 2283
Heide-Spravka, K. G. von der 2056
Heideman, P. D. 686
Heidger, C. 2356
Heikkilä, R. 7519
Heilman, P. E. 1835, 2031, 3996
Heilman, W. E. 2924
Heilmann, B. 6554
Heilmeier, H. 2083
Heimann, J. 2512
Heimann, M. F. 5655
Heimerich, R. 4567
Heimo, C. R. 9395
Heine, P. R. 5355
Heinen, J. T. 10127
Heinen, R. A. 4370
Heiniger, U. 184, 7412, 7854
Heinimann, H. R. 235
Heinonen, R. 9088
Heinrich, M. 5166, 7811
Heinrich, R. 1012
Heinsdorf, M. 915
Heinstein, P. F. 208
Heiramo, T. 5971
Heiska, K. 3517
Heiskanen, J. 3422, 6077, 6081, 6901-6902, 9472
Heisler, G. M. 7032
Heislers, A. 7566
Heissenbuttel, J. 1846
Heitert, J. 2871
Heitzman, E. 162, 1781
Hejjaoui, A. 54
Hekhuis, H. J. 265, 1051
Helander, M. L. 2226, 5652
Helbig, F. 9500
Held, A. A. 6474
Helfand, G. E. 2716
Helińska-Raczkowska, L. 4636
Heliövaara, K. 7839
Helle, P. 4061
Helle, T. 4061, 7277, 10061
Hellemans, P. 4960
Heller, L. I. 5313
Heller, W. 3762, 3801
Helles, F. 9623
Hellgren, E. C. 3201
Hellgren, M. B. 8712
Hellgren, O. 3315
Hellqvist, C. 3183
Hellqvist, S. 1152
Helmer, D. B. 2293
Helmisaari, H. S. 7960
Helms, J. A. 2828
Helson, B. 2380
Helson, B. V. 678, 8353, 9186
Helweg, O. J. 1534, 2559
Hemmerlein, M. T. 3733
Hendee, C. W. 6777
Hendee, J. C. 6777
Hendershot, W. H. 886, 888, 8819
Henderson-Sellers, A. 3557
Hendra, D. 2059
Hendrick, R. L. 409, 2030
Hendromono 903, 1710
Hengeler, C. 8890
Hengst, G. E. 1197
Henifin, J. R. 5481

Hennessey, T. C. 6977
Hennigar, P. 5801
Hennon, P. E. 8121
Henriksen, T. M. 1125
Henrion, B. 5595
Henriques, M. O. 3687
Henriques-Gil, N. 5549
Henry, C. 896
Henry, C. L. 894, 3406
Henry, J. P. 5429
Henry, W. A. 3502
Henry, W. T. 1756
Hensarling, C. M. 9823
Hensbergen, H. J. van 3210
Hensen, I. 9920
Hensley, D. L. 68, 4309
Henttonen, H. 3221
Henze, C. H. 8846
Hepburn, A. 5353
Heppel, T. 2955
Heppell, S. S. 3209
Heras, J. de las 1195, 5364
Heras, P. de las 3705
Herbert, D. A. 7882, 9461
Herbert, I. 8603
Herbold, H. 7537
Herbst, M. 9719
Hercé, É. de 4405
Hereford, D. 7554
Herendeen, P. S. 5377
Hering, S. 3129
Herisetijono 4168
Herman, B. 90, 4277
Herman, F. 9750
Hermanin, L. 2711
Hermann, S. M. 7200
Hermeline, M. 9611
Hermet, M. 9139, 9674
Herminjard, S. 9323
Hernádez Alonso, R. 9147
Hernández, A. 8373
Hernández, J. O. 2338
Hernández, L. 7149
Hernández, R. 4307
Herndon, A. 4480
Herppich, W. B. 8817
Herr, D. G. 7387, 9964
Herranen, J. 3653
Herranz, J. M. 1195, 5364
Herre, E. A. 5373
Herrera, C. M. 477
Herrera, M. 3908
Herrera, P. 3705
Herrera, R. 3544, 3650
Herrero, G. 950, 1086, 1540
Herrmann, A. 4668
Herrón O., F. E. 1900
Hertel, H. 8209
Hertz, J. 1302
Hervé, J. C. 4202
Herwitz, S. R. 391, 5470, 7123
Herzog, F. 4116
Herzog, S. 5535, 9987
Heslop-Harrison, J. S. 9056
Hess, N. J. 7399
Hess, W. M. 3011, 3144
Heszky, L. E. 876
Heuer, M. L. 2491
Heukamp, B. 9475, 9497
Heuperman, A. F. 7579
Heurck, P. van 5703, 6653
Heusèrr, M. 991
Heuveldop, J. 6207
Hewett, B. 5248
Hewett, R. K. 2132
Hewitt, C. N. 8015
Heybroek, H. M. 826
Heyd, R. L. 1459
Heydecke, H. 944
Heyden, D. 5976-5977
Heyder, J. 2566
Heyser, W. 5581
Hibben, C. R. 7406
Hibbs, D. E. 836, 5150, 6784, 7190
Hibino, K. 8063
Hicklenton, P. R. 2436
Hickman, C. A. 772
Hickman, G. W. 5133
Hicks, R. R., Jr. 3584
Hicks, S. 17
Hiernaux, P. H. Y. 7148
Hiernaux, P. Y. 3922
Hietala, A. M. 5620
Higaki, M. 6450
Higashiura, Y. 9157
Higgins, K. B. 1193
Higgs, K. H. 3618, 4311
Higler, L. W. G. 3934
Higuchi, H. 2287, 2954, 4631
Higuchi, M. 1245
Hijii, N. 4887, 8840
Hikita, H. 3393
Hildebrand, E. E. 5236, 5948, 9696, 9755
Hiley, G. 7547
Hilje Q., L. 4146-4147
Hilker, M. 2352
Hill, A. 7554
Hill, D. B. 8682
Hill, D. E. 4088
Hill, E. P. 6677
Hill, J. D. 7310
Hill, K. D. 5432
Hill, R. 8743
Hill, R. A. 3511
Hill, R. L. 679, 8636
Hill, R. S. 497, 3065, 6770, 8143-8144
Hill, S. A. 9853
Hill, S. E. 1811
Hill, T. C. J. 8320, 9096
Hillan, J. M. 4376
Hillebrand, K. 4250
Hillel, J. 9028
Hiller, N. 8148
Hillgarter, F. W. 6249
Hillier, B. 6740
Hillis, W. E. 4628
Hillman, B. I. 8302
Hillman, C. 6507
Hills, S. C. 4331, 6127, 6632
Hilt, M. 1472
Hiltunen, J. 7845
Hiltunen, R. 3043
Himadri Panda 6870
Himmelreich, U. 8085
Hinckley, T. M. 1932, 1995, 8495, 8930
Hindle, J. R. 9897
Hinesley, L. E. 881, 3467, 6144, 9556
Hingston, R. A. 7716
Hinkel, K. M. 7880
Hinssen, P. J. W. 4429
Hinton, A. C. 1332
Hipkins, V. D. 563
Hipps, N. A. 4311
Hira, G. S. 883
Hirakawa, Y. 6587
Hirano, H. 5193
Hiraoka, A. 450
Hirasawa, T. 9453
Hirata, K. 7791
Hirata, Y. 6171
Hiratsuka, Y. 5623, 8116, 8300, 8345
Hiremath, I. G. 2317
Hiremath, P. C. 2283
Hiremath, S. V. 2283
Hirimburegama, K. 9442
Hiroi, T. 7173
Hirschheydt, J. V. 8327
Hirt, P. W. 5927
Hiruki, C. 4874
Hiruma, C. A. 6153
Hirvijärvi, E. 5955
Hisatomi, H. 9678
Hishiyama, S. 1241
Hitchmough, J. D. 4145
Hiura, T. 8659
Hjeljord, O. 10070
Hjelm, O. 8777
Hladík, M. 45
Hladnik, D. 5201
Hlavka, C. A. 1045
Ho, C. K. 8570
Ho, R. H. 9528, 9855
Hoad, S. P. 2807, 5221
Hoare, J. R. L. 3355
Hobbs, M. W. 6957
Hobbs, N. T. 7549
Hobbs, R. J. 766, 6573, 7413, 8141
Hobbs, S. D. 3794
Hobson, K. R. 7205
Hoc, P. S. 2051
Hočevar, M. 5201
Hoch, O. 2698, 8866
Hoch, P. C. 3995
Hochberg, M. E. 2511
Hochbichler, E. 227
Hock, B. 8401
Höck, B. K. 4402
Hockenjos, W. 5972
Hodge, G. R. 4045, 8217, 8507
Hodge, S. J. 10143
Hodges, J. D. 5213, 9575
Hodges, L. 8502, 9189
Hodgkinson, M. C. 8828
Hodgkiss, P. D. 1135
Hodgson, B. 5352
Hodgson, J. 9226
Hodnett, M. G. 8871
Hodouto, K. K. 979
Hoebeke, E. R. 5746
Hoedl, W. 720
Hoek, R. van der 1555
Hoekstra, A. 2386
Hoen, H. F. 2483, 2901, 8013, 9406, 10134
Hoey, M. T. 586
Hof, D. E. 1028
Hofer, R. M. 6398-6399, 8944
Hoff, R. J. 9105
Hoffard, W. H. 2729
Hoffman, F. O. 8844
Hoffman, J. A. 8380
Hoffman, M. T. 528
Hoffman, W. A. 5356
Hoffmann, C. 4196, 8118
Hoffmann, T. 1187
Hofmann, C. 7057
Hofsten, H. von 188, 8670, 9551
Hogan, G. D. 7941, 8111
Hogan, K. P. 1880
Hogan, L. 5759
Högberg, H. E. 7504
Högberg, K. A. 3777, 3828, 9846
Högberg, M. 7646
Högberg, P. 24, 1145, 2493, 3627, 4295, 6618, 7646, 9726
Högbom, L. 24, 2493, 3755, 7646
Hogenbirk, J. C. 9770
Hogervorst, R. F. 5318
Hogetsu, T. 2372, 5774, 6612
Hogg, B. W. 8648
Hogg, E. H. 4771
Hogsett, W. E. 6497
Hohenstein, W. G. 2728, 6100
Hohn, M. E. 9160
Hohtola, A. 4833, 5404, 5513, 6054
Hoke, S. H., II 2496
Hokkanen, T. J. 9685
Holbrook, N. M. 2999, 3614, 5283, 5376, 6302, 9779
Holdenrieder, O. 9092
Holdsworth, D. K. 2674-2675, 9566
Holeman, R. T. 6977
Holl, F. B. 7926
Holl, K. D. 4094
Holland, A. J. 1523
Holland, D. N. 1870
Holland, E. A. 3625
Holland, M. R. 4558
Holley, A. G. 3167
Hollinger, D. Y. 4597, 4693
Hollingsworth, M. K. 9469
Hollingsworth, R. G. 5686-5687
Holly, C. 3442
Holm, J. L. 2389
Holm, S. O. 3039
Holm, S. R. 8103
Holm, Y. 3043
Holmberg, M. 1955
Holmer, L. 8289
Holmes, M. G. 6238
Holmes, S. B. 1498
Holmes, T. P. 5192
Holmes, W. E. 307
Holmgren, P. 2708, 3250
Holmsgaard, E. 911, 6930
Holmstrom, J. 1801
Holopainen, J. K. 2868, 4035, 5397, 5693, 6296, 8107
Holopainen, T. 1129, 5326, 6296, 6310, 6322, 6336, 7096, 7392, 8822
Holsten, E. H. 1491, 4892
Holstener-Jørgensen, H. 911, 6930
Holt, H. A. 4683, 6360
Holt, J. 1030
Holtfrerich, D. R. 1622
Holton, K. C. 620
Holub, A. N. 9717
Hom, J. L. 5762
Homann, P. S. 3577
Homès, J. 4292
Hong, R. F. 2384
Hong, S. H. 9783
Hong, S. K. 7292
Hong, Y. P. 563, 4827
Honkanen, A. 5522
Honkanen, T. 2959, 8892
Honma, T. 9446
Honrubia, M. 4844, 8285
Hood, I. A. 4017, 4860
Hooda, A. K. 4120
Hoof, L. van 6952
Hoogenboom, G. 800
Hooker, J. E. 10000
Hoosein, M. 3584
Hoover, K. 7400
Hope, A. 2913
Hope, A. S. 3187
Hope, D., III 2468
Hopey, M. E. 3195
Hopkin, A. A. 2256
Hopkins, D. L. 2288
Hopkins, E. R. 7717, 8196
Hopkins, M. S. 2132, 2798
Hopmans, P. 3418, 6119
Höppe, P. 5045
Hopper, G. M. 5212
Hoque, A. K. F. 6017, 6108
Hoque, E. 1255
Horak, E. 5592, 8277
Horen, C. van 8556
Horgan, G. 1635
Hori, S. 7603
Hori, T. 1845
Horn, M. M. 8084
Hornbeck, J. W. 352, 4578
Hörnberg, G. 3068, 7259-7260
Horne, R. 4351
Horner, H. T. 8251
Horner, L. M. 5143
Horning, N. 3524
Horntvedt, R. 5331
Hornung, M. 7127
Horsley, S. B. 942, 4341
Horvath, E. 3483
Horvitz, C. C. 540, 6558
Horwath, W. R. 3641
Hoshino, Y. 7276
Hosking, G. 4075
Hosking, G. P. 4797, 7837
Hosman, K. P. 607, 5800
Hosoda, I. 4931
Hosokawa, K. 1927
Hosoyama, H. 9813
Hossaert-McKey, M. 8956
Hossain, A. K. M. A. 7927
Hossain, M. 5097, 6717, 8577
Hossain, M. M. 6717
Host, G. E. 1619
Hostettmann, K. 200, 9798
Hottelet, C. 5831
Hottinga, F. 1555
Hou, Y. Q. 2384
Houghton, D. R. 9348
Houghton, R. A. 4953
Houle, D. 7891
Houle, G. 478, 3119, 6116, 6579
Houllier, F. 1362, 4204, 4433, 4634, 5018, 8701, 8863, 9356
Houpis, J. L. J. 7093

House, A. P. N. 591
Houston, D. B. 8240
Houston, D. R. 1462, 7401, 8240
Houston, K. E. 3057
Hout, K. D. van den 7105
Houten, H. van 8491
Houtzagers, M. R. 6938
Hove, L. W. A. van 2862
Hovenden, M. J. 2041
Howard, A. F. 9654
Howard, D. C. 5848
Howard, F. W. 8351, 9129
Howard, J. J. 5696
Howard, J. L. 43
Howard, T. E. 1055, 2537
Howard, W. J. 6838
Howarth, P. J. 2752
Howe, E. A. 7297
Howe, G. T. 6489
Howe, H. F. 9061
Howell, C. L. 5743
Howell, G. S. 5910
Howells, B. W. 3539
Howle, J. F. 8874
Hoy, N. T. 7715
Hoza, D. 862
Hradetzky, J. 6213, 9602
Hrašovec, B. 4891
Hřib, J. 8287
Hristoforoglu, K. 5103
Hrubík, P. 838
Hruby, B. A. 3020
Hrynkiewicz, J. 9975
Hsiao, J. J. 9837, 9840
Hsiao, J. Y. 5547
Hsieh, T. H. 5435
Hsieh, Y. T. C. 1622
Hsiu, F. S. 4539
Hsiung, W. 10106
Hsu, C. C. 3516, 3520
Hsu, Y. H. 5671
Hu, B. F. 2253
Hu, C. Y. 870
Hu, F. S. 8150
Hu, R. J. 8381
Hu, T. S. 1601
Huang, A. H. C. 440
Huang, B. L. 8922, 9036
Huang, C. L. 4185
Huang, H. 592
Huang, H. J. 8922
Huang, H. T. 446
Huang, H. W. 2217
Huang, J. 3573
Huang, L. C. 8922, 9036
Huang, M. R. 6895
Huang, N. H. 3739
Huang, Q. Q. 8213
Huang, S. 1838
Huang, S. F. 5435
Huang, S. M. 1838
Huang, T. C. 5435
Huang, T. Z. 5775
Huang, X. 7649
Huang, X. M. 7844
Huang, Y. 4834
Huang, Y. H. 4834
Huang, Z. Y. 9120
Huante, P. 6309
Hubbard, K. G. 9189
Hubbard, R. M. 5412, 5958, 8929
Hubbell, S. P. 2272
Hubbes, M. 3998, 5635
Huber, F. 4639
Hubert, B. 5869, 5877, 7621
Hubert, C. 6101
Hubert, M. 4152
Hubert, P. 9765
Hubick, K. T. 3765
Hübl, S. 122
Huc, R. 4506
Hudáková, K. 3304
Hudcová, L. 7088
Hudler, G. W. 3654, 5644
Hudson, J. 5830
Hudson, J. A. 4081
Huemmrich, K. F. 1043
Huetteman, C. A. 6096
Huettl, R. F. 9324
Huff, M. H. 7136
Huffaker, R. G. 8361
Huffman, D. W. 4348
Hughell, D. 218-221
Hughes, C. 1252
Hughes, C. E. 590, 2224, 6015
Hughes, C. L. 8766
Hughes, F. M. R. 10081
Hughes, H. R. 5990
Hughes, J. W. 1229
Hughes, K. 2411
Hughes, L. 484
Hughes, M. K. 7612
Hughes, R. N. 3659
Hughes, S. 353, 360, 5242-5243, 7127, 8020
Hugon, D. 9244
Huguet, L. 1545
Huhn, G. 8848
Hui, G. Y. 6984
Hui, Y. 9170
Huising, E. J. 718
Hukusima, T. 6916
Hullen, M. 9618
Hulme, M. 5797
Hulme, M. A. 651
Hulme, P. D. 3063
Hultberg, H. 1950, 5245, 5323, 6339, 8851, 8853
Humber, R. A. 2336
Humble, L. M. 5695, 7455
Humphries, C. J. 5921
Humphries, S. 5415
Hunger, W. 9707
Hunsaker, C. T. 8736
Hunshal, C. S. 2421
Hunt, E. R., Jr. 2705, 7011
Hunt, G. L., Jr. 10066
Hunt, J. A. 1792, 2641, 8629, 8669, 9550
Hunt, J. E. 4693
Hunter, A. F. 387, 5709
Hunter, M. D. 2328, 7446
Hunter, M. L., Jr. 1510, 1515
Hunter, T. 5647
Huntingford, C. 8511
Huntley, B. 2149
Hunziker, M. 8451
Huot, J. 4072, 4903, 8358, 10072
Hupp, C. R. 543
Hurand, A. 10089
Hurter, P. J. H. 9900
Husain, T. 2723
Hushagen, J. 778
Hüsing, F. 9618
Huss, J. 948
Huss-Danell, K. 3015, 5587, 7943
Hussain, G. 1534
Hussain, M. Z. 6106
Hussendörfer, E. 7343
Hussin, M. A. 7730
Huston, M. A. 11, 2847
Hutcherson, J. D. 3667
Hutcheson, J. 4075
Hutcheson, J. A. 4797
Hutchings, A. 981
Hutchings, N. J. 8014
Hutchinson, K. W. 3981
Hutchinson, T. C. 3544, 3650
Hutchison, L. J. 8300, 9998
Hutchison, P. 7706
Huth, J. R. 6906
Hutley, L. B. 7944
Hüttermann, A. 1593
Hüttl, R. F. 6802, 7754, 7923
Huttunen, S. 3647, 5955-5956, 7079, 7098
Hüve, K. 5315, 8099
Huwer, R. K. 2311
Huxster, W. T. 4260, 9557
Huxtable, R. J. 209
Hwang, J. W. 2192
Hwang, S. I. 9783
Hwang, S. N. 3492
Hwang, S. Y. 9192
Hwang, Y. H. 4540, 9671
Hwang, Y. S. 9567
Hyde, K. D. 7384, 8307
Hyde, W. F. 3347, 9264
Hyder, A. S. 5215
Hyland, B. P. M. 6769
Hyldahl, C. A. 1054, 4229
Hynek, V. 2878
Hynynen, J. 8649, 9959
Hytönen, J. 898, 3450, 5106, 7756
Hyttinen, H. 4035
Hyun, J. O. 8204
Hyvärinen, M. 5957
Iacobelli, A. 801
Iacobellis, N. S. 8316
Iatrou, G. D. 4803
Ibáñez, M. 1746, 1826
Ibarra-Manríquez, G. 473
Ibarra-Vidal, H. 2329
Ibo, J. G. 2522
Ibrahim, K. G. 4174
Ibrahima, A. 295, 7916
Ichihara, K. 9606
Ichikawa, T. 2339
Ichino, T. 2339
Ida, H. 9005
Iddi, S. 5058
Ide, Y. 4285, 6585, 6886, 9447-9448, 9451
Idei, T. 6053
Idris Abdol 3241
Idso, S. B. 3003, 3485, 5226
Idu, M. 9425
Iehara, T. 2783
Ierusalimov, E. N. 10039
Ievinsh, G. 5409
Iezzoni, A. F. 5090
Ifeka, A. 6795
Igarashi, T. 7046
Igarashi, Y. 7454, 9159, 9673
Iglesias, M. T. 8035
Ignas, C. M. 268
Ignatova, N. 7982
Igoe, M. J. 8298
Igoud, S. 900
Iguchi, K. 4900, 7463
Ihrig, D. 6881
Ihse, M. 8404
Ihsle, T. 1398
Iida, S. 3226, 8403, 9019
Iijima, T. 6450
Iinuma, M. 9810, 9832, 9841
Ikawa, H. 4012
Ikeda, H. 4285, 9451
Ikeda, S. 4339
Ikeda, T. 4040, 4184, 8348
Ilangovan, R. 8347
Ilik, P. 467
Ilstedt, B. 9416
Ilvessalo-Pfaffli, M. S. 5920
Imai, H. 9822
Imai, T. 3714
Imaichi, R. 2931
Imaizumi, Y. 7616
Imamura, T. 3743
Imaña-Encinas, J. 6538, 9919
Imatomi, Y. 962
Imazeki, T. 4411, 4418
Imbault, N. 1313
Immenroth, J. 8525
Impens, I. 3713, 4213
Impens, R. 2082
Inada, M. 4391
Inada, S. 5395
Inamdar, S. N. 6996
Inbar, Y. 5257
İnceoğlu, Ö. 8124
Incoll, W. 2504
India, Entomology Research Institute 5806
Ineichen, K. 7390
Ineson, P. 4572, 5255, 7900, 8790
Infante, A. 6727
Ingegnoli, V. 6750
Ingemarsson, B. S. M. 8108
Inger, R. T. 9222
Ingersoll, R. C. 3621
Ingham, E. R. 5606
Ingleby, K. 600, 906
Ingles, A. W. 8490
Inglis, A. 1013
Inglis, I. R. 1509
Ingraham, N. L. 1108, 4083
Ingram, G. B. 2426
Ingram, J. S. I. 8491
Ingram, L. L., Jr. 655
Ingram, R. 590
Ingram, S. W. 1389
Iñiguez, F. J. 9775
Innes, J. L. 1301, 1303, 2093, 2714, 3033, 3541, 4721, 5417, 6453, 6812, 8118, 8946, 9624, 10122
Inoue, M. 3344
Inoue, T. 8951
Inoue, Y. 3004
Inouye, R. S. 3093
Insam, H. 7759
Intari, S. E. 2342, 2379, 8349
International Society for Horticultural Science 1603
Inukai, H. 4411, 4418
Inzé, D. 2087, 7377
Ionescu, O. 7596
Ioniţă, L. 8189
Iovino, F. 4378, 4935, 7832, 8667, 9238, 9571
Ipatov, L. F. 5168
Ipinza, R. H. 8237
Ipinza C., R. 3425
Ipinza Carmona, R. 1435
Iqbal, M. Z. 304, 10155
Iqbal, S. H. 8253
Irala, B. 1560
Iritz, Z. 4080
Irland, L. C. 4172, 4938
Irons, J. R. 1044, 1854
Irvine, A. K. 6513
Irvine, J. 4518
Irwin, L. L. 1572, 6684
Isaev, A. S. 4544
Isagi, Y. 4530
Ischinger, L. S. 6565
Isebrands, J. G. 1606, 1619, 6605, 6826, 8936
Isenhart, T. M. 9273
Isenmann, P. 3092
Ishibashi, S. 4411, 4418, 7115
Ishida, K. 427, 6612
Ishida, M. 1741
Ishii, K. 6893, 8483
Ishii, T. 7173, 9833
Ishikawa, T. 2721
Ishikawa, Y. 8741, 9637
Ishimaru, Y. 8092
Ishitawa, M. 4798
Ishizawa, K. 4010
Ishizu, A. 1239
Ishkov, Y. G. 4611
Ishwaran, N. 768
Islam, A. 6716
Islam, M. 8677
Islam, M. R. 6108, 8677
Islam, R. 5097
Islam, S. S. 6172
Islebe, G. A. 3079, 5448, 6537
Ismail, S. 8586
Isman, M. B. 7479
Ismariah, A. 6046
Isopi, R. 2406, 9079
Israelsson, H. 3518
Istas, J. R. 7085
Italy, Accademia dei Georgofili 8481
Italy, Forestry Inspectorate, Bolzano 5978
Itam, K. 588
Ito, F. 9168
Ito, S. 2193, 2373, 4865, 5776-5777, 6545, 6630, 8653
Ito, Y. 9145
Itoh, K. 3738, 5391
Itoh, T. 425
Iturriaga, L. 1700
Ivanov, A. I. 533
Ivanov, B. N. 8772
Ivanov, V. F. 5186
Ivanov, V. P. 1269
Ivanova, É. A. 5419
Ivanushkina, N. E. 8278
Ivashov, A. V. 1484
Ivask, M. 7893
Ive, J. 6713
Ive, J. R. 7134

Ivens, W. P. M. F. 2866
Iverfeldt, Å. 8851, 8853
Iverson, L. R. 6240
Ivkov, M. 4807
Ivonin, V. M. 1103, 4944
Ivonis, I. Yu. 2073-2074
Ivshin, A. P. 9592
Iwabuchi, S. 3142
Iwai, Y. 7697
Iwakawa, O. 7712
Iwaki, M. 7035
Iwanami, K. 8063
Iwaoka, M. 9522
Iwasa, Y. 3117, 9958
Iwasaki, S. 9813
Iwata, H. 9603
Iwatsubo, G. 3413
Izhaki, I. 1196, 9777
Izraylevich, S. 7443
Izuta, T. 3669, 7048, 9747
Jaaskelainen, T. 7845
Jabiol, B. 1918
Jablonska, A. M. 6348
Jaccarini, V. 16
Jackson, B. 9289
Jackson, B. D. 9643
Jackson, B. L. 8736
Jackson, G. E. 4518
Jackson, G. H. 7694
Jackson, J. F. 2973, 3747, 8076
Jackson, M. B. 1597
Jackson, M. S. 421
Jackson, N. A. 7670
Jackson, P. 3614, 6302
Jackson, P. C. 2999, 5283
Jackson, P. L. 5209
Jackson, R. J. 3909
Jackson, S. T. 3040, 4805
Jackson, W. J. 8490
Jacob, P. 1187
Jacob, S. 1147
Jacob, V. J. 416
Jacobée, F. 5124
Jacobs, C. A. 2018
Jacobs, G. J. 8570
Jacobs, J. W. 707
Jacobs, K. A. 2265
Jacobsen-Lyon, K. 7376
Jacobson, G. L., Jr. 8151
Jacobson, J. S. 5313
Jacobsson, S. 8260
Jacobsson, U. 9805
Jacoby, G. C. 4140
Jacovelli, A. P. 7699
Jacques, M. 2591
Jacques, M. A. 8290
Jacquet, B. 1560
Jactel, H. 2337, 5700
Jadhav, B. B. 7317
Jaeger, M. 4642
Jaenicke, H. 8186
Jaenson, R. 3287
Jafarsidik, Y. 1808, 7560
Jaffré, T. 8887, 8983, 9247
Jagels, R. 2450
Jäger, H. J. 449, 7965
Jagtap, T. G. 6996
Jahiel, M. 8037
Jahnige, P. 2782
Jaimes Sánchez, V. 1314
Jain, A. 7456
Jain, A. K. 2594
Jain, P. P. 1657
Jain, R. K. 58, 2540
Jain, S. H. 1721
Jain, S. M. 6782
Jaindl, R. G. 8808
Jaipuriar, M. K. 832
Jaiswal, H. R. 108, 114, 145, 4110
Jaiyeoba, I. A. 8024
Jakabhazy, V. D. 4444
Jakobs, J. 4251, 6009
Jakobsson, E. 3754
Jakubas, W. J. 3200
Jakuš, R. 9632
Jalil, P. 843, 858, 6036, 6593
Jalkanen, A. 902, 8595, 9471
Jalkanen, R. 660, 4022, 5639-5640, 7079, 7663, 9118, 10010
Jalkanen, R. E. 1301
Jamal, A. 7428
Jamaluddin 7385, 9085
Jamaludheen, V. 9057, 9438
Jamaludin Kasim 204
Jambu, J. 1913
James, A. C. 2966
James, D. 46
James, J. C. 2807
James, S. H. 578
James, S. M. 3965
Jameson, P. E. 4271
Jamey, P. 3822
Jamnick, M. 4353
Jamwal, U. 1669, 2557
Janardhanan, K. 2061, 6946
Jandl, R. 4504, 7754
Jane, G. T. 4051
Janeiro, L. V. 8580
Janežić, T. S. 8088
Jang, S. S. 8239
Janhunen, S. 6310
Janin, G. 8090
Janisch, R. 8287
Janistyn, B. 3660
Jankun, A. 7167
Janos, D. P. 5271
Janowska, E. 137
Jans, L. 1334
Jansen, A. E. 4296
Jansen, D. 4480
Jansen, E. 4721
Jansen, J. J. 4179, 6986
Jansen, K. P. 6515
Janssens, A. 4177
Jansson, G. 9875
Jansson, P. E. 4516
Jansson, S. 7254, 8219-8220
Janz, K. 3522
Janz, N. 648
Japan, Japan International Research Center for Agricultural Sciences 18
Jaquish, B. 4827
Jaramillo J., D. F. 1900
Jaraquemada, F. 1321
Jarchow, D. 9513
Jardillier, J. C. 2579
Jardim, M. A. G. 5188
Jardon, Y. 1486, 5764
Jarlfors, U. E. 8314
Jarman, S. J. 9945
Jarnail Singh 3499, 4338
Jarosz, W. 1971
Järvinen, E. 9685
Jarvis, D. I. 3073
Jarvis, P. G. 2008, 2841, 7381, 7384, 8383
Jasenská, M. 3304
Jasik, J. 7739
Jasińska, M. 5306
Jasper, D. A. 5591
Jasumback, A. 6236
Java-Sharpe, B. J. 9507
Javornik, B. 5614, 8974
Jay-Allemand, C. 443, 2587, 2981, 4667, 5069
Jayalaxshmi Mistry 1385
Jayaram, M. 6704
Jayaraman, K. 8504, 8628
Jayasekera, R. 3751
Jayasingam, T. 1368
Jayasundara, H. P. S. 3994
Jayasuriya, A. H. M. 1374, 10123
Jayawickrama, K. J. S. 6027, 6134
Jaziri, M. 4292
Jebb, M. 1287, 1473
Jędrzejewska, B. 4058, 4917
Jędrzejewski, W. 4058, 4917
Jefferies, W. C. 262
Jeffery, H. A. 3670
Jeffrey, W. G. 8482
Jeglum, J. K. 8159
Jéhan, H. 5092
Jehlicka, J. 2863
Jellison, J. 9715
Jeng, R. S. 5635
Jengjalern, A. 8528
Jenkins, A. 354, 3677, 8419
Jensen, D. B. 7281
Jensen, E. 3017, 6488, 8927
Jensen, E. Ø. 7376
Jensen, F. S. 1583
Jensen, M. 9388
Jensen, N. 4988
Jensén, P. 3627, 6478, 7056, 7971, 9726
Jensen, S. 3754, 5343
Jensen, S. R. 8914
Jentschke, G. 1593, 7920
Jeong, J. H. 5265-5266
Jeong, Y. 5839
Jerlin, R. 71
Jerman, I. 5476
Jermstad, K. D. 5481
Jeschke, W. D. 1288
Jessner, G. 3660
Jessop, R. 3371
Jessup, L. W. 7294
Jesus, R. M. de 1179, 9898
Jett, J. B. 3125-3126, 4045, 4260, 9557
Jetten, V. G. 7274
Jetter, R. 6404
Jeugd, H. P. van der 4065
Jewell, F. F., Sr. 8310
Jeyarajan, R. 1442, 2295, 3153
Jha, A. N. 1664
Jha, C. S. 3513
Jha, K. K. 66
Jha, L. K. 6646, 9561
Jha, M. 681
Jha, M. N. 2815
Jha, P. K. 2242, 6880
Jha, S. 7732
Jha, T. B. 7732
Jhulan Bandyopadhyay 9564
Ji, L. Z. 5688
Ji, P. 8512
Ji, Y. 9022
Ji, Y. M. 3770
Ji, Y. P. 2384
Jia, J. 10069
Jiang, F. Q. 8381
Jiang, I. B. 5479
Jiang, K. 4738
Jiang, Q. Y. 1914, 2400
Jiang, X. N. 8112
Jiang, Y. 1722, 6903
Jiang, Y. F. 10009
Jiang, Y. X. 3555
Jiang, Z. L. 3267
Jiangshan 5669
Jifon, J. L. 9670
Jiko, L. R. 4168
Jikumaru, S. 4888
Jilli, R. H. 7055, 7307
Jilli, R. O. K. 6939, 8590
Jim, C. Y. 10144
Jiménez, I. A. 4744
Jiménez, J. 226
Jiménez Madrigal, Q. 3850
Jiménez Ramírez, J. 1323
Jiménez Rojas, J. 9130
Jin, B. 8243
Jin, U. H. 9710
Jindal, S. K. 2161, 2209, 5734
Jing, Y. 10012
Jinghua, Z. 5540
Jinks, R. 1684
Jipp, P. H. 4085
Jitendra Pandey 6328
Jitendra Sharma 5190
Joarder, O. I. 5097
Jobidon, R. 164, 2486, 3880, 4905, 5137-5138
Jöbstl, H. A. 6834, 7856
Jochheim, H. 1134
Jocteur-Monrozier, L. 1909, 8081
Jodai, S. 1260, 2977, 4671, 4715
Jodal, I. 2325
Jodha, N. S. 4166, 4463
Joel, G. 5199
Joeressen, H. J. 7488
Joergensen, R. G. 7933
Joffre, J. 1913
Joffre, R. 295, 1234, 4077, 7916
Johann, E. 2476
Johann, K. 6915, 9465
Johannisson, C. 1145, 4295, 7646
Johannsen, C. J. 7851
Johannsmeier, M. F. 6150
Johansen, C. V. 9743
Johansen, S. 475
Johansson, K. 9757
Johansson, L. 1571
Johansson, M. 3311, 5629
Johansson, M. B. 3445, 4494-4495, 6285, 8777, 9702
Johansson, S. G. 5960, 5981, 6021-6023, 6094, 6131, 6384, 6574, 6669
Johansson, T. 9826
Johansson, U. 6983, 7981
Johansson, U. T. 6802
John, E. 9227
Johns, A. G. 9203
Johns, B. G. 9203
Johns, B. W. 3217
Johnsen, F. H. 6732
Johnsen, K. H. 80, 1265, 9041, 9851
Johnsen, Ø. 3378, 3829, 8046, 8210, 9878
Johnsingh, A. J. T. 2844
Johnson, A. 996
Johnson, A. H. 1169-1170, 2864, 4478, 5296, 5954, 7080
Johnson, A. S. 3196, 5827, 10059
Johnson, B. N. 1784
Johnson, C. 2244
Johnson, C. D. 3948, 7214
Johnson, C. E. 319
Johnson, D. 5302
Johnson, D. V. 193
Johnson, D. W. 2865, 4533, 7662, 7967, 8780
Johnson, E. A. 479, 2169, 3845, 6375, 9886, 10137
Johnson, E. C. 8921
Johnson, G. R. 2265
Johnson, H. B. 5227
Johnson, H. L. 3716
Johnson, J. 9
Johnson, J. A. 4124, 6607
Johnson, J. D. 6301
Johnson, J. E. 37, 381
Johnson, J. M. 4026
Johnson, K. B. 8312
Johnson, K. D. 9496
Johnson, K. N. 2626
Johnson, L. 1342, 1344
Johnson, L. A. 5212
Johnson, L. A. S. 7224
Johnson, L. F. 1045, 4452
Johnson, M. 2732
Johnson, M. L. 7517
Johnson, N. C. 3093
Johnson, P. S. 3149
Johnson, R. J. 9189
Johnson, R. L. 5213
Johnson, W. C. 3699
Johnsson, K. 1521
Johnston, C. A. 7082
Johnston, M. 7335
Johnston, P. J. M. 7204
Johnston, P. R. 8637
Johnston, S. 5214
Johnston, V. R. 6785
Johnstone, W. D. 9419
Jokai, R. 1793
Jokela, A. 7079
Jokela, E. J. 2618, 2859, 4542, 5293, 9457
Jokiluoma, H. 3359
Jokinen, J. 7092
Jokinen, K. 4279
Jokinen, K. J. 5072
Joly, C. A. 1113
Jones, D. 5601, 6725
Jones, E. A. 217, 4208, 4223
Jones, E. B. G. 7384
Jones, G. C. 678
Jones, G. D. 6680
Jones, J. E. 9055
Jones, K. B. 8736
Jones, M. D. 4004

Jones, M. H. 6103
Jones, N. 4101
Jones, N. B. 4282
Jones, R. B. 41
Jones, R. H. 551, 2891, 3965
Jones, R. O. 6396
Jones, S. 1684
Jones, S. D. 6680
Jones, S. H. 1403
Jones, S. K. 73, 3384
Jong, E. de 8386
Jong, R. de 1617
Jonghe, F. de 7610
Jonsell, M. 4126
Jonsson, B. G. 7254
Jönsson, C. 1905, 8510
Jonsson, C. 10054
Joo, R. W. 8747
Joosten, N. N. 1142, 1972, 5312
Jordan, C. F. 10116
Jordan, G. A. 236
Jordan, G. J. 3065, 5556, 7724
Jordan, M. 1700
Jordan, R. A. 5453
Jordano, P. 477, 9204
Jorez, J. P. 8552
Jørgensen, B. B. 10005
Jorgensen, G. S. 5866
Jørgensen, J. E. 7376
Jorissen, D. 4576
Jose, A. I. 6279
Joshi, B. C. 62
Joshi, K. C. 640, 4042, 7433, 7456, 10041
Joshi, L. 2461
Joshi, M. 535, 6294
Joshi, M. D. 1551
Joshi, M. R. 8490
Joshi, N. K. 95, 6089
Joshi, N. V. 2944
Joshi, R. B. 6865
Joshi, S. R. 2673
Joshie, P. 522
Joslin, J. D. 3639, 3667
Josse, C. 3072
Jost, A. 1020, 6218
Jost, L. K. 9983
Jouanin, L. 4812, 5543
Joubert, E. 4125
Jourdain, M. 3816
Journal of Environmental Quality 2460
Journal of Forestry 2423, 2524, 2538, 5039, 5985, 9399
Jouvenceau, S. 157
Jouventin, P. 9297
Joy, K. W. 317
Joyard, J. 6472
Joyce, B. J. 7985
Joyce, L. A. 3551
Joyeux, M. 6954
Juárez, M. E. 7575
Judd, T. S. 2100
Juge, C. 5571
Juhasova, G. 8321
Juin, E. 5349
Julien, G. 5801
Julkunen-Tiitto, R. 2880, 4665, 5768, 6317, 6492, 7472
Julliot, C. 7541
Jump, B. A. 5662
Juncker, B. 4276
Juneja, M. L. 699, 5875
Jung, H. G. 8204
Jung, K. 4708
Jung, P. von 2344
Junghietu, I. I. 6757, 8674
Jungst, S. E. 3258
Junkermann, W. 3662, 6338
Junod, P. 3281
Junttila, O. 1209, 3017, 3767, 6488, 7355-7356, 8927
Juo, A. S. R. 8491
Juritz, J. 4973
Jusaitis, M. 6034
Just, K. 2432
Justice, C. 6230
Justice, C. O. 9630
Justin, M. J. 5731
Juuti, S. 5314
Juvik, J. O. 4148, 9669
Jylhä, P. 3450
Jyoti Singh 2876
Kaabeche, M. 3927
Kaarakka, V. 5960, 5981, 6023, 6094, 6120
Kaarakka, V. J. 5960, 5981, 6021, 6023, 6094, 6120
Kabay, E. D. 3138
Kabir, N. E. 2412
Kachhawaha, G. R. 8630
Kachi, N. 8183
Kackar, N. L. 2161, 2209, 2593
Kadam, S. S. 430
Kadeba, O. 2704
Kadiata, B. D. 2240, 8265
Kadir, S. A. 282, 1894
Kadmon, R. 5461
Kadomatsu, M. 7118
Kafisheh, W. 8330
Kafka, I. 9454
Kafundu, R. 8870
Kageyama, H. 9831
Kahl, J. S. 3320, 3574
Kahler G., C. 6169
Kahn, F. 5048, 7620
Kahn, J. R. 7571
Kahn, M. 6185, 9366
Kahn, M. R. 9565
Kähr, M. 3405, 5292
Kaĭbiyaĭnen, L. K. 2886, 4526, 5946, 8058
Kaila, S. 7777
Kaine, G. W. 7578
Kainkwa, R. M. R. 4946
Kainulainen, P. 4035, 5397, 8107
Kaipiainen, L. 8058
Kaipiainen, L. K. 9751
Kais, A. G. 5057
Kaiser, A. 7097
Kaiser, W. 2084
Kaitera, J. 660, 4022, 5639-5640, 9118, 10010
Kajba, D. 4288
Kajembe, G. C. 1570
Kaji, M. 9673
Kajihara, M. 1777, 4360, 6824, 8698
Kajihara, N. 1777, 4360, 6824
Kajimoto, T. 4400
Kajimura, H. 4887
Kajita, S. 5537
Kajji, A. 2487
Kakihara, M. 6973
Kakizawa, H. 6850
Kákoniová, D. 3398, 6486-6487, 8925-8926
Kaku, H. 425
Kakubari, Y. 1927
Kakuda, Y. 8673
Kakudidi, E. K. Z. 7798
Kala, J. C. 4092
Kalabin, G. V. 7091
Kal'chenko, V. A. 5484
Kaletnik, N. N. 5308
Kalia, S. 4042
Kalimuthu, K. 2095
Kalin Arroyo, M. T. 3839
Kalina, J. 467, 5408
Kalinin, A. M. 2642
Kalinkina, N. M. 9740
Kalisz, P. J. 4300
Kalle, M. L. 8516
Kalliola, R. 2765
Källman, S. 1810
Kalyan Singh 712
Kalyani, K. B. 2251
Kam, M. de 1453, 1465
Kam, T. S. 9825
Kamachi, H. 3008
Kamada, M. 7292
Kamal Sharma 710, 6089, 9281
Kamaluddin, M. 6060
Kämära, J. 5338
Kamaruzaman Jusoff 5895, 8738
Kamata, N. 7454, 9159
Kamenická, A. 109
Kamijyo, A. 4896
Kamis Awang 29, 3240, 5050, 6867, 9420
Kamitani, T. 2096
Kammen, A. van 8264
Kamminga-van Wijk, C. 3631
Kamoen, O. 7409
Kamp, B. J. van der 4392, 6631
Kampert, M. 7388
Kamps, R. H. 1688
Kan-Fan, C. 3846
Kanak Sahai 482, 2573
Kananji, B. 3992
Kanda, F. 5463
Kandler, O. 3522, 8946
Kané, A. 3340
Kane, M. 1705
Kanekawa, S. 4475
Kaneko, N. 8840
Kaneko, S. 2277, 7125
Kanesharetnam, S. 5115
Kang, B. T. 5262, 6868, 7758
Kang, H. 589, 3717, 8040
Kang, J. M. 9447
Kang, K. S. 8204
Kang, L. 2227
Kang, Y. H. 8655
Kang, Y. J. 9978
Kang, Z. X. 10009
Kangas, A. 5198, 9353
Kangas, J. 2483, 2722, 3334, 4430, 9200, 9610, 10136
Kanie, K. 8889
Kanisawa, K. 8653
Kanmegne, J. 2542
Kannan, K. 3157
Kanowski, P. J. 9967
Kant, S. 9651-9652
Kantvilas, G. 9945
Kantz, K. E. 8976
Kanzaki, K. 6194, 7108, 7831
Kanzila, M. 8680
Kao, C. 3492
Kaojarern, S. A. 7852
Kaomini, M. 2475
Kaoneka, A. R. S. 3249
Kape, K. M. 2240
Kapela, E. B. 4048
Kapel'kina, L. P. 3228
Kapeluck, P. R. 8501, 8708
Kapik, R. H. 9849
Kaplunov, V. Ya. 4410
Kapoor, K. K. 5264
Kapoor, K. S. 3192
Kapos, V. 3566, 3790, 7843
Kappelle, M. 3901, 5460, 6537, 7575
Kappor, S. L. 7143
Karaban, R. T. 5332
Karabourniotis, G. 7161
Karácsonyi, Š. 8925-8926
Karadžić, D. M. 5653
Karagiannakidou, V. 1355
Karajeh, F. F. 5870-5872
Karaki, Y. 8653
Karam, M. A. 9635
Karam Singh 9249
Karama, A. S. 3262
Karameris, A. 737
Karasov, W. H. 9207
Karavaeva, E. N. 1954
Kareemulla, K. 4100, 8678
Karelin, D. V. 6449
Kärenlampi, L. 23, 3653, 6336, 9746
Kärenlampi, L. V. 2868
Kärenlampi, S. O. 2868
Karev, G. P. 5964, 6836
Karim, M. R. 5097
Kariyappa, G. S. 3370
Karizumi, N. 9019
Karjalainen, R. O. 2868
Karjalainen, T. 5026, 9376
Karki, J. B. S. 9290
Karki, M. 9290
Karki, M. B. 6965, 9290
Karki, N. 9290
Karlik, J. F. 5792
Karlin, U. 4951
Karlman, M. 4169, 4867
Karlsson, A. 6921
Karlsson, I. 2590
Karlsson, K. 6983
Karlsson, P. S. 6482
Karnatak, D. C. 155, 734, 4108, 9418
Karnosky, D. F. 4834, 5544
Karoles, K. 9378
Karolewski, P. 1161, 1164, 7083, 7086, 7188-7189
Karpachevskiy, L. O. 300
Karpinski, S. 6480
Karpov, L. N. 1584
Karpov, V. A. 2642
Karsenty, A. 9609
Karsh, M. B. 6364
Karsikko, J. 9200
Kartasubrata, J. 6106
Kartawinata, K. 1738, 3238
Kartusch, B. 2945
Karunakaran, K. R. 725
Karunawansha, E. 8920
Karvonen, P. 5498
Kasel, S. 3635
Kashio, M. 18
Kashuba, A. Yu. 2544
Kashuba-Hockenberry, L. A. 1590
Kasischke, E. S. 1858, 2762, 4450, 5202, 6227, 7275
Kassier, H. W. 4384
Kastenholz, E. 823
Kastner, W. W., Jr. 4856
Katagiri, K. 10047
Kataki, S. K. 3084
Katayama, Y. 3985, 5536-5537, 7369, 8092
Katayose, T. 2032
Katende, A. B. 7798
Kathiresan, K. 2603, 4675, 4699, 4713, 6113
Katiyar, R. S. 7802
Kato, H. 6585
Kato, M. 1304, 2931, 8951
Kato, N. 6450
Kato, T. 1304
Katoh, S. 1260, 4671, 4715
Katovich, S. A. 924
Kätsch, C. 1034, 6982
Katsuki, T. 6221
Katsuya, K. 2260, 4857-4858, 6626
Kätterer, T. 8048, 8767
Kätzel, R. 7067, 7104, 8335, 8847
Katzensteiner, K. 7487, 7754
Kauffman, J. B. 377, 527, 1559, 2922
Kaufmann, E. 1303
Kaufmann, M. R. 2992
Kaul, O. N. 6806
Kaul, P. N. 8079
Kaul, R. B. 6420
Kaul, R. N. 7559, 9243
Kauman, W. G. 9400
Kaunisto, S. 129
Kaupp, W. J. 677
Kauppi, A. 4617, 6400, 8896
Kauppi, P. E. 7968
Kauppinen, V. 875
Kaur, R. 112
Kausch, W. 7028, 8607
Kaushal, A. N. 141, 789, 1837, 8597
Kaushik, J. C. 1737, 7319
Kavanagh, R. P. 4062, 10064
Kaverzina, L. N. 4604
Kawabe, H. 4600
Kawaguchi, H. 7772
Kawahara, T. 8225
Kawai, S. 426, 5536-5537, 7369
Kawakami, Y. 7108
Kawakita, H. 6650
Kawamuro, K. 9914
Kawanabe, S. 8157
Kawano, C. 2287
Kawano, K. 3117
Kawano, S. 6585
Kawasaka, Y. 9832
Kawasaki, F. 9947
Kawashima, S. 357, 7217
Kawata, N. 4201
Kawchuk, L. M. 8300
Kay, C. E. 7543
Kay, M. 5136, 5142

Kaya, Z. 824, 4654, 8212, 9968
Kayahara, G. J. 1906, 4321, 8776
Kayombo, L. 1796
Kayser, W. M. 8282
Kazakov, L. A. 3228
Kazanfarova, V. K. 1004
Kazantseva, M. N. 4950
Kazda, M. 8163
Kazimirov, N. I. 5187
Kazungu, J. 4676
Ke, J. 2848
Keane, K. M. 1138
Keane, P. J. 4869
Keane, R. E. 470
Keding, W. 9402
Kedit, P. M. 9555
Keeland, B. D. 7063
Keeley, J. W. 4652
Keenan, R. 6278
Keenan, R. J. 3585
Keener, H. M. 4308
Keever, G. J. 7734, 8457-8458
Kegler, H. 8318
Kehar Singh 699
Kehr, R. D. 9068
Keil, M. 5527
Keita, J. D. 5891
Keith, D. A. 3698
Keith, H. 2697
Keith, L. B. 687
Keizer, P. J. 9084
Keller, B. 7430
Keller, E. A. 189, 961
Keller, J. C. 1641
Keller, M. 2154, 2409, 8873
Keller, R. 2040
Keller, T. 336, 1126, 2495, 5220, 6191, 6341
Keller, W. 6967
Kelley, W. D. 3171, 4025, 7399, 8831
Kelliher, F. M. 1124, 2010, 4693
Kellman, M. 1417, 3960, 6547
Kellomäki, S. 1621, 3488, 4174, 5026, 5231, 6822, 7033, 7040, 7861, 8032, 9376
Kelly, C. A. 3678
Kelly, C. K. 2960, 8061
Kelly, D. 3827, 4620
Kelly, J. F. 8367
Kelly, J. M. 3648, 6347
Kelly, P. E. 2440
Kelly, R. C. 2496
Kelly, V. R. 7308
Kelsey, R. G. 417, 4893, 7478
Kelt, D. A. 7524
Kelty, M. J. 3431
Kemp, G. H. J. 1452, 5622, 5632, 8291
Kemp, R. H. 1012
Kemppainen, L. 7779
Kenda, Y. 4729
Kendall, J. 6230
Kendrick, B. 7928
Kendrick, W. B. 8262
Kenis, M. 680
Kenjale, R. Y. 8023
Kennedy, B. M. 8874
Kennedy, G. 3680
Kennedy, G. G. 8833
Kennedy, H. E., Jr. 3626
Kennedy, R. W. 4242
Kennedy, V. 5242-5243
Kennel, E. 1023
Kennett-Smith, A. K. 9717
Kenney, W. A. 2402
Kennis, P. A. F. 5460
Kent, M. 3831
Kenward, R. E. 2389
Kenya, Kenya Forestry Research Institute 2571
Keoboualapha, B. 8409
Kerber, S. 2669
Kermavnar, A. 9862
Kernan, C. 4784
Kerns, E. H. 1811
Kerp, H. 508
Kerr, B. D. 8874
Kerr, G. 2543, 2635, 4365, 5440
Kerr, W. E. 6643
Kerr, Y. H. 1032
Kersters, K. 8266, 9071
Kerstiens, G. 7090
Kertadikara, A. W. S. 8246
Kesava Reddy, K. 4969
Keshavaiah, K. V. 4100, 8678
Kessel, C. van 1138
Kessler, E. 9369
Kessler, J. J. 1547, 1555, 8466
Kessler, P. J. A. 4163
Ketchum. R. E. B. 9331
Ketner, P. 3104
Kettela, E. G. 5139
Kettler, S. M. 3096
Kettner, B. 8681
Kettrup, A. 8865
Kevan, P. G. 8673
Kevers, C. 1704, 3774, 7743, 8577, 9455
Keymeulen, R. 9334
Khade, K. K. 6726
Khalaf, S. 3691
Khalil, A. A. M. 4518
Khaliq, C. A. 5200
Khan, A. R. 5710
Khan, G. H. 6115
Khan, I. A. 9591
Khan, J. A. 2844
Khan, M. A. 4373, 9955
Khan, M. A. S. 6108
Khan, M. H. 1536
Khan, R. A. U. 6074
Khan, S. A. 199, 8687
Khan, S. N. 605
Khan, T. 4373
Khan, T. A. 2499
Khanna, P. 3357, 8555, 9389
Khanna, P. K. 1096, 2697, 5110, 7718, 7927
Khanna, S. 8268
Khanna, S. S. 8392
Khantemirova, E. V. 7994
Khara, A. 3272
Kharel, S. 6742
Khari, P. 8058
Kharin, N. 2405
Kharuk, V. I. 1256
Khasa, P. D. 185, 1612, 2208, 7736, 8566
Khatra, L. M. 8907
Khatri, L. M. 7172
Khatri, P. K. 1945
Khazaal, K. 437
Khemani, L. T. 9760-9761
Khemnark, C. 3242
Khitun, O. V. 6536
Khlifi, S. 7746
Khodzhaev, Sh. 657
Kholopova, L. B. 300
Khoo, K. C. 204, 2479
Khosla, P. K. 99
Khotpal, R. R. 2975
Khudaĭberdyev, R. 1348
Khudaĭbergenov, M. 657
Khullar, P. 93, 2673, 3495, 4974, 5894
Kicklighter, D. W. 1834, 3551
Kida, H. 6953
Kielbaso, J. J. 5910
Kieliszewska-Rokicka, B. 444, 842, 1140, 4003
Kielland-Lund, J. 3925
Kienast, F. 246, 2431, 2756, 4751, 7267
Kienholz, H. 10088
Kiernan, M. 1012
Kietvuttinon, B. 5050
Kietzka, J. E. 552-553
Kiew, R. 7232, 7249
Kiff, E. 6966
Kigomo, B. N. 998, 3833
Kihiyo, V. B. M. S. 3251
Kiikkilä, O. 3570
Kijidani, Y. 4582, 9795
Kijkar. S. 2600, 2622
Kikata, Y. 1151, 4547
Kikuchi, S. 6910
Kikuchi, T. 9984
Kikuzawa, K. 8042
Kil, J. H. 9312
Kile, G. A. 3353, 5344
Kilian, W. 9640
Kilic, O. 1040
Kilinç, M. 1224
Killingbeck, K. T. 322
Kim, B. R. 9793
Kim, C. M. 8742
Kim, C. S. 9978
Kim, D. I. 9567
Kim, D. K. 8656, 8709
Kim, G. T. 8834, 9709-9710
Kim, H. S. 5699
Kim, J. H. 9240, 9567
Kim, J. K. 9163
Kim, J. T. 8849
Kim, J. W. 8573, 8656-8657
Kim, J. Y. 8727-8728
Kim, K. H. 8742, 8852
Kim, K. S. 8204, 8346
Kim, M. 33, 1059
Kim, N. D. 3675
Kim, P. 4895
Kim, S. 5839
Kim, S. C. 7153
Kim, S. H. 8238
Kim, S. K. 9311-9312
Kim, T. H. 5265-5266, 8849
Kim, T. O. 8849
Kim, W. W. 8238
Kim, Y. G. 1240
Kim, Y. J. 8238
Kim, Y. K. 8087
Kim, Y. S. 1239, 8239
Kim, Y. T. 9842
Kim, Z. S. 2192, 5501
Kimball, B. A. 3003, 3485, 5226
Kimball, D. G. 9201
Kimberley, M. O. 69, 4174, 4786, 4942
Kimbrough, J. W. 9090
Kimbu, S. F. 9808
Kimiwada, K. 5261
Kimmins, H. 5930, 9570
Kimmins, J. P. 3585, 5930, 6278, 9516, 9570, 9596
Kimura, K. 8996
Kimura, M. 4798, 5065
Kimura, S. 8065
Kindermann, G. 5315, 7983, 8099
King, C. Y. 8874
King, D. A. 2428, 2697
King, F. Y. 8296
King, G. G. S. 5705
King, G. W. 4312
King, I. P. 5870
King, J. A. 2812, 6369
King, J. N. 4258, 4592
King, K. M. 6262
Kinghorn, A. D. 746
Kingsbury, P. D. 8353
Kingsford, S. J. 1508
Kingsley, N. P. 1022
Kinjo, J. 441
Kinjo, K. 7175
Kinkor, V. 2863
Kinlaw, C. S. 5493
Kinloch, B. B., Jr. 9114
Kinloch, J. E. 3707
Kinn, D. N. 8352
Kinney, K. K. 8683
Kinoshita, A. 6603
Kinoshita, I. 9914
Kins, L. 3649
Kinsel, G. R. 1812
Kinuura, H. 8339
Kiprianov, A. I. 463, 1268
Kiran Tak 2592
Kirby, E. G. 1699
Kirby, G. C. 8691
Kirby, K. 3277
Kirby, K. J. 735, 10124
Kirby, M. C. 7578
Kirdmanee, C. 7741
Kirihara, S. 6462
Kirk, S. A. 9103
Kirkbride, J. H., Jr. 8977
Kirkland, G. L., Jr. 3193
Kirkman, H. 6069
Kirkpatrick, J. B. 3477, 3953, 10128
Kirkwood, I. A. 4570
Kirpichnikova, T. V. 6335
Kirschbaum, M. U. F. 32, 2697
Kirton, L. G. 7481
Kisanuki, H. 6274, 6585
Kishchenko, I. T. 5422, 8059
Kishk, M. A. 3372
Kishor, N. 5219
Kiss, E. 876
Kiss, J. 876
Kissling, P. 1215
Kisternaya, Z. N. 9517
Kitagawa, K. 4632
Kitahara, H. 8769
Kitajima, K. 483, 3792
Kitajima, M. 9821
Kitamura, H. 8889
Kitamura, K. 2203, 7354, 7365
Kitaya, Y. 7741
Kitayama, K. 3918, 6287, 7311, 7882
Kitching, R. L. 7294
Kite, G. 9801
Kite, G. C. 8971
Kitt, J. 2365
Kittredge, D. B., Jr. 3431
Kitunen, V. 5109, 7953
Kitzberger, T. 3291
Kitzmiller, J. H. 4329
Kiyohara, T. 8348
Kjær, E. D. 8187
Kjelgran, R. 778
Kjelgren, R. 442, 4093, 5849, 5909, 8459
Kjelgren, R. K. 6096
Kjellberg, F. 8956
Kjøller, A. 3575
Kjønaas, O. J. 5246, 5323
Klaassen, R. K. W. M. 8069
Klaudová, A. 3304
Kleb, H. 2169
Kleemann, G. 5587
Kleemola, S. 6333
Klein, C. 8744
Klein, F. 7538
Klein, H. 3181
Klein, J. P. 3281
Kleiner, K. W. 2323
Kleinman, P. J. A. 7574
Kleinn, C. 2759, 3506, 4436, 6218, 9919
Kleinpeter, J. 1160
Kleinschmit, J. 1674, 2216, 6511, 9778
Klekowski, E. H. 9052
Klekowski, E. J., Jr. 5520, 8857, 9052
Klemedtsson, L. 1095
Klemmedson, J. O. 3694, 6372
Klenner, W. 1511
Klevorn, R. E. 6489
Klíčová, Š. 457
Kliczkowska, A. 7285
Kliejunas, J. T. 606
Klimaszewska, K. 2189, 2601, 6894, 8224
Klimetzek, D. 2305
Klincsek, P. 3644
Kling, G. J. 138
Klingauf, F. 5002
Klingelhöfer, D. 9993
Klinka, K. 257, 1906, 3489, 4321, 6253, 8776
Klinkovsky, T. 467
Klironomos, J. N. 7928, 8262
Klockow, D. 1187
Kloeppel, B. D. 5009
Klubica, D. 10158
Kludze, H. K. 1120
Klug, M. J. 7642
Klumpers, J. 8090
Kmiecik, M. 3440
Knani, J. 54
Knaphus, G. 8251
Knapp, A. K. 2991, 3791
Knapp, H. D. 8318
Kneeshaw, D. D. 1814
Knight, A. W. 7853

Knight, C. L. 5442
Knight, D. H. 1143, 2911, 4013
Knight, J. D. 2307
Knoke, T. 7552
Knop, E. 4953
Knopf, F. L. 4127
Knops, J. M. H. 4190
Knott, J. 1708
Knowe, S. A. 171, 2709-2710, 5140, 9515
Knowles, F. B. 2659
Knowles, K. 7484
Knowles, P. 2105
Knox, R. G. 1382, 3116
Knulst, J. C. 8002
Kobak, K. 5209
Kobashi, S. 3598-3599
Kobayashi, H. 4468, 9522
Kobayashi, J. 9813
Kobayashi, M. 427, 4874
Kobayashi, S. 6435, 6939, 7055, 7307, 8590, 8996
Kobayashi, T. 3598-3599, 8850
Kobe, R. K. 5181, 7328
Koc, J. 1377, 2139
Koch, G. W. 313
Koch, J. M. 1542
Kochalca, N. L. de 1378
Kochert, G. 3987, 5530
Kochhar, S. 5558
Kochkina, G. A. 8278
Kochummen, K. M. 7226-7227
Kocięcki, S. 899
Kock, M. de 3778
Kocoń, J. 2016-2017
Kodaira, T. 6703
Kodrík, M. 6964, 7151
Koehler, J. 9105
Koehler, P. A. 3893
Koek-Noorman, J. 6521
Koenig, W. D. 4190, 4733
Koerper, G. J. 7071
Koffa, S. N. 6614
Koh, J. G. 9978
Köhl, M. 242, 1021, 1303, 4436, 6211, 6219-6220, 7836
Kohl, M. 6809
Köhler, B. 6584
Kohli, R. K. 7318
Köhlin, G. 9262
Kohls, S. J. 2230, 4841
Kohlstock, N. 1418, 4230, 8209
Kohmann, K. 8046
Kohno, K. 6008
Kohut, R. J. 6464
Kohyama, T. 2943, 6427
Koide, N. 9820
Koike, M. 7616
Koike, T. 7864
Koiso, Y. 9813
Koistinen, E. 6971
Koizumi, H. 8768, 9844
Kojima, K. 4040, 4896, 6886, 9536
Kojima, S. 9926
Kojwang, H. O. 5641
Kokko, H. I. 2868
Kokou, K. 3706, 8533
Kokovkina, T. F. 1962
Kokubu, Y. 4865
Kokunova, T. A. 4306
Kokx, T. 6754
Kolari, K. K. 3622
Kolb, K. J. 1118
Kolb, T. E. 7985
Kolbek, J. 4776, 8993
Kolchugina, T. P. 5209, 9661
Kolderman, P. J. 2823
Kolehmainen, J. 5768, 7472
Kolenka, I. 10
Kolevska-Pletikapić, B. 7368, 8582
Kolosova, N. V. 5780, 9183
Kolström, M. 5231
Kolström, T. 3462, 8032, 9577
Komaromy, E. 1330
Komatsu, T. 7437
Komissarenko, A. N. 9811
Komissarenko, N. F. 9811
Komiyama, A. 689
Kompen Hormazabal, M. 2597
Komulainen, M. 7934
Kon, H. 7894
Konar, J. 8175
Kondo, M. 4632
Kondo, T. 4286, 8225
Kondolf, G. M. 8357
Kondrateyev, S. A. 5835
Koné, O. N. 3340
Kone, P. 8519
Kong, F. X. 9073
Kong, J. A. 3516, 3520
Kong, J. S. 8655
Kong, L. 6048
Kong, L. S. 5078
König, G. 8015
König, J. 5685
Konijnenburg-van Cittert, J. H. A. van 508
Konishi, S. 9822
Konjević, R. 855, 3721
Konno, Y. 8659, 9947
Konohira, Y. 6993
Konopko, A. 7534-7535
Kontriš, J. 7144, 7273
Kontrišová, O. 7144, 7273
Kontunen-Soppela, S. 6494
Kontzog, H. G. 10048
Konuklugil, B. 8909
Koo, C. D. 7812
Koo, K. S. 5265
Koonce, K. L. 2375
Koop, H. 150, 4214
Koopmans, C. J. 5318
Kooten, G. C. van 1961, 7015, 8540, 8546
Kopeszki, H. 4504
Kopp, D. 4162, 8846
Kopp, R. F. 6029
Koppalkar, B. G. 4100, 8678
Koptev, V. I. 8789
Koptur, S. 2983
Korać, M. 2109
Korban, S. S. 1703
Korchagina, M. P. 7757
Korchunova, I. Yu. 5361
Korczyk, A. F. 7349-7350
Korhonen, K. T. 7814
Koricheva, J. 4886
Kořínek, J. 10
Kormuťák, A. 423, 488, 7150
Körner, C. 4465, 4565, 6764, 7178
Korning, J. 3078, 3313, 3952
Korol, R. L. 9361
Koroleva-Zaslavskaya, T. M. 5437
Korotaev, A. A. 279, 2656
Korotkov, A. 2770
Korotkov, A. V. 3522
Korovin, G. 9386
Korovin, G. N. 4544
Korpel', Š. 45, 6909
Korpela, E. J. 152
Korpilahti, E. 7637
Korsmo, H. 4056
Kort, I. de 350
Korten, F. F. 1013, 2781
Korzukhin, M. D. 9363
Kosasih, E. 1530
Kosenko, G. I. 10020
Koshijima, T. 3743
Koshy, M. P. 3984
Košir, B. 5025
Koske, R. E. 9080
Koski, V. 7637, 8492
Kossak, S. 4913
Kostál, R. 5832
Kostermans, A. J. G. H. 8980
Kostikov, I. Yu. 1106
Kostin, N. V. 5186
Kostka, S. J. 2286
Kosugi, K. 1898
Kotar, M. 3190, 5175
Kotey, N. A. 2723
Kotsabassidis, D. 7161
Kotterink, B. 3806
Kottke, I. 6623, 7392, 8274
Koturanov, D. L. 1778
Kotzias, D. 8865
Koua, M. 4333
Kouki, J. 3278
Koukoura, Z. 3726
Koul, V. K. 8597
Kourouma, B. 9782
Kouterick, K. B. 7985
Kouyate, A. M. 8532
Kovač, M. 5201
Kovačić, Đ. 4409
Kovacic, D. A. 4076
Koval, C. 4983
Kovalev, V. N. 9811
Kovyazin, V. F. 2652
Kowalchuk, T. E. 8386
Kowalczyk, F. 8290
Kowalski, M. 7329-7330
Kowalski, T. 5636, 9068, 9092
Kowsar, A. 1116
Koyama, H. 5536
Koyama, Y. 4391
Kozai, T. 7741
Kozak, A. 2684, 6820, 9346
Kozak, R. A. 9346
Kozhevnikova, N. N. 4711
Kozhevnikova, T. L. 7980
Kozłowska, A. B. 1380
Kožuch, J. 7431
Krabel, D. 431
Kracke, W. 8830
Krafsur, E. S. 9172
Kraft, D. 5542
Krahmer, R. L. 1178, 4350
Kraigher, H. 5614, 9081
Krajicek, V. 1254
Králík, J. 457
Kramer, H. 226, 944, 6982, 9343
Kramer, K. 2510, 2804, 4618
Kramm, G. 3649
Kranenborg, K. G. 826
Kranig, S. 3805
Kranigk, J. 2512, 9342
Krannitz, S. H. 5705
Krapfenbauer, A. 227
Krasikov, S. A. 2643
Krasnovidov, A. N. 2643, 5361
Krasowski, M. 9508
Krasowski, M. J. 5005, 9503
Krasutskii, B. V. 9131
Kratochwil, A. 6394
Kräuchi, N. 8171
Krause, C. 6760
Krause, S. C. 7490
Krauss, H. H. 8592
Kravchenko, A. V. 9740
Krawiarz, K. 844
Krč, J. 5025
Křečová, V. 3304
Krehan, H. 9158
Kreienmeier, U. 9329
Krekling, T. 8581, 9087
Kremenetskiĭ, K. V. 3891
Kremer, A. 594, 1419, 2175, 2216, 3306, 3977, 4153, 5557, 6429, 9971
Krepkiĭ, I. S. 6408
Kress, L. W. 1158
Kresse, F. 2948
Krestov, P. V. 2145
Kretinin, V. M. 5854
Kretzschmar, U. 4280
Kreutzer, K. 3632, 3664, 7760
Kreutzweiser, D. P. 6644
Kriechbaum, R. 1218
Kriedemann, P. E. 1133
Krieger, H. 1139, 4211, 4215
Krishan, B. 9414
Krishnamurthy, K. 7291
Krishnamurthy, K. V. 4644
Krishnamurthy, L. 5938
Krishnamurthy, R. 5328
Krishnan, P. N. 5087
Krishnapillay, B. 6877
Krissinel, E. 6351
Kristensen, M. M. H. 7745, 9445
Kriticos, D. 168
Kritikos, T. 7780
Krivolutskiĭ, D. A. 7980
Krivosheeva, A. A. 6335
Križaj, B. 1214
Križo, M. 1310, 3750
Kroese, H. W. 3754
Krogstrup, P. 7745, 9445
Krömer, S. 5414
Kronfuss, H. 2799
Kröniger, W. 6481
Kronka, F. J. N. 2750
Kronrad, G. D. 3167
Kronzucker, H. J. 9727-9729
Kropp, B. R. 5598-5599
Kros, J. 1967, 7978
Krott, M. 9660
Krsnik-Rasol, M. 7368
Kruczynski, L. R. 6236
Kruger, E. L. 4686-4687
Krüger, F. 10079
Kruger, F. J. 7594
Krüger, G. 7607
Krüger, R. 9618
Kruglic, I. A. 5780
Krugner, T. L. 2271, 8281
Krumbiegel, A. 9304
Kruse, R. L. 4226
Krusel, N. 373
Krutilla, K. 9264
Krutov, V. 9118
Krutovskii, K. V. 7361, 8223
Kružić, T. 4414
Kryuchkov, V. V. 1157, 7993
Kryuchkova, L. A. 1269
Kshattriya, S. 1917
Kubačková, M. 6486-6487, 8925-8926
Kubertavichene, L. 8796
Kubíček, F. 7302-7303, 9011, 9742, 9946
Kubien, D. S. 6080
Kubin, E. 7779
Kubincová, M. 8191
Kubiniok, J. 9764
Kubisiak, T. L. 5494, 8229
Kubiske, M. E. 1265, 2842, 4692, 4709, 7191
Kubitzki, K. 3035
Kublin, E. 9602
Kubo, T. 7116, 9958
Kubono, T. 4853, 4864
Kubota, Y. 8659
Kucaba, S. 1816
Kučera, J. 1932, 2831, 7061
Kuchelmeister, G. 1588, 10147
Kuchenbrod, E. 3601
Kudinov, A. I. 9542
Kudoh, H. 2032, 4346, 7118
Kudryavtseva, I. V. 44
Kudsk, P. 7789
Kufakwandi, F. 822
Kufner, M. B. 1383
Kuga, H. 689
Kuhn, A. J. 7647
Kühnel, S. 9498
Kuhns, M. R. 1121
Kuik, P. 3749
Kuikman, P. J. 4474
Kuiper, P. J. C. 1966
Kuiters, A. T. 1907, 3806
Kuitunen, M. 1522
Kujawa-Pawlaczyk, J. 7284
Kukda, G. 5082, 6055
Kukuev, Yu. A. 2681
Kulandaivelu, G. 6305
Kulčárová, V. 5835
Kulej, M. 1428
Kulhavy, D. L. 5179
Kulikov, N. V. 1954, 7979
Kulinich, O. A. 5780, 9183
Kulkarni, A. S. 2975
Kulkarni, N. 10041
Kulkarni, P. R. 5398
Kulkarni, S. 1637
Kull, K. 4660, 5001
Kull, O. 3661, 7030
Kull, P. 4721
Kullman, L. 3064, 3066, 7613
Kulmala, M. 1955, 5324, 6351
Kumakura, Y. 6944
Kumar, A. 98, 101, 103, 3689, 4336, 8954, 9248
Kumar, B. 9249
Kumar, B. M. 161, 8654
Kumar, N. S. 9817
Kumar, N. S. K. 2975

Kumar, P. 130, 286, 1712, 1902, 2607, 8654, 9443, 9474
Kumar, P. J. D. 9393
Kumar, R. 213, 730, 1737, 1993, 3689, 8672, 9032, 9251
Kumar, R. N. 2292
Kumar, S. 1993, 2021, 9254, 9648, 10092
Kumar, V. 2623
Kumar, V. S. K. 9648
Kumar Datta, B. 4650
Kumaran, K. 71
Kumaravelu, G. 283
Kummer, D. M. 4953
Kunarattanapruk, K. 5035
Kunert, K. J. 5543
Kung, F. H. 5540
Kung, W. L. 4442
Kuniata, L. S. 1760
Kunimoto, Y. 667
Kunisaki, T. 6973
Kunkel, G. 747
Kunshuakova, M. V. 1952
Kuntz, S. 2757
Kunz, T. H. 6695
Kunze, I. 1697
Kuo, J. 6466
Kuo, J. L. 8922
Kuo, T. T. 8922
Kupatt, C. C. 8494
Kupfer, J. A. 1376
Kupiec, J. A. 8732
Kupkowski, G. 2056
Küppers, J. G. 4252
Küppers, K. 5333
Küppers, M. 2797
Kurahashi, A. 6585
Kuramoto, N. 8225
Kurets, V. K. 3796
Kurihara, A. 9178
Kurimoto, M. 6008
Kurita, N. 9447
Kurka, A. 5109
Kurkela, T. 5397, 7663
Kurkela, T. T. 1301
Kurniaty, R. 861
Kuroda, K. 2373
Kuroda, Y. 2260, 4857-4858, 6626
Kurokawa, M. 8688
Kuropat, P. 6492
Kuropatwa, R. 467
Kursar, T. A. 315
Kurth, H. 4164
Kurtz, W. B. 6235, 6363, 6504
Kurz, M. L. 1220
Kurz, W. A. 3623
Kusaba, K. 418
Kusché, W. 245
Kuser, J. E. 4832, 8572, 9995
Kush, J. S. 2505
Kushari, D. P. 8175
Kushida, T. 2377, 7480
Kushigbor, C. A. 2767
Kushwaha, S. P. S. 2757
Küsmenoglu, S. 9804
Kusum Lata 429
Kusumoto, I. T. 6953
Kusunoki, M. 4874
Kutbay, H. G. 1224
Kute, L. S. 430
Kutiel, P. 1199, 8885
Kutnar, L. 5476
Kutt, A. S. 5822
Kutzbach, J. E. 507
Kuuluvainen, T. 9664, 9685
Kuusela, K. 1372, 6841, 9320
Kuusipalo, J. 2483, 2722, 6000, 6022, 7560, 7770, 7781
Kuwahara, M. 3743
Kuyper, T. W. 2245, 9075
Kuz'michev, E. P. 10017
Kuz'mina, M. V. 463
Kuznetsov, Yu. A. 367
Kuznetsova, E. A. 5077
Kuznetsova, L. D. 5077
Kuznetsova, M. G. 2153
Kuznetsova, N. F. 7169
Kvaalen, H. 2585, 7744
Kvarnheden, A. 5507, 8195
Kwant, R. A. 3550
Kwesha, D. 6816, 7846
Kwiatkowska, A. 1958
Kwiatkowska, A. J. 1396, 3943
Kwok, R. 1029-1030
Kwon, J. H. 1813
Kwon, K. W. 2192
Kwong, R. M. 5787-5790
Kylin, H. 3754, 5343
Kyparissis, A. 2047, 7027
Kytö, M. 1478
Kytömaa, A. 8843
La Marca, O. 280, 3468, 8724
Laakso, I. 3043
Laakso, K. 1627
Laar, A. van 179-183, 1034
Laarman, J. G. 5970
Laasonen, L. 9200, 10136
Łabanowski, G. 2370
Labat, J. N. 7236, 9893
Labatut, A. 4551
LaBau, V. J. 3314
Labbé, P. 1063, 4796
Labbe, T. 594
Label, P. 1313, 2584, 3401
Laborde, J. 6736
Labrecque, M. 917, 9459
Labutin, Yu. V. 8360
Laca, E. A. 3120
Laca-Buendia, J. P. 2147
Lacapa, R. 233
Lacaze, B. 1234, 3508, 9236
Laçej, F. 5807
Lacerda, L. D. 1092
Lacey, M. J. 5365
Lachance, D. 6591, 9676
Lachaud, G. 7679
Lacki, M. J. 3208
Lacointe, A. 1257, 2487
Lacroix, E. 9323
Lacy, R. C. 5818-5819, 8363-8364
Ladd, P. G. 1306, 2101
Ladiges, P. Y. 496, 2117, 5434, 8055
Ladipo, D. O. 6868, 7758
Lado, P. 1286
Laeyendecker, D. 8464
Lafaurie, C. 8309
LaFayette, P. R. 8249
Laffan, M. 8743
Lafitte, J. J. 1585
LaFlamme, G. 9101
Lafleur, P. M. 1060, 1926, 7949
LaFrankie, J. V. 963
LaFrankie, J. V., Jr. 472
Låg, J. 9692
Lagarde, M. 2529
Lago, M. 8277
Lahav, H. 9777
Lähde, E. 2483, 4396-4397
Lähdesmäki, P. 6494
Lahera, W. 1434
Lahiri, A. K. 4970, 7170
Lahoz, C. 7177
Lahti, T. 5324
Lahtinen, A. 6819
Lahtiperä, M. 6455, 7989-7990
Lai, C. C. 5531
Lai, C. K. 3263, 9267
Lai, Y. C. 87
Laiho, O. 4396-4397
Laiho, R. 3571, 9509
Laine, E. 7092
Laine, J. 407, 3571, 9509
Laine, K. 966, 6494
Laird, C. E. 2535
Laird Van Damme, R. P. F. 2536
Laitat, E. 2082
Laitinen, K. 7040, 7861
Lajeunesse, D. 8439
Lajtha, K. 1144, 5304
Lajudie, P. de 7389
Lakhani, K. H. 8369, 8372
Lakhey, S. P. 8490
Lakshmanan, K. K. 2095
Lakshmi, G. 1365
Lakshminarasimhan, P. 504-505
Lakshminarayana, K. 7316
Lal, B. 8268
Lal, P. 94, 140, 5114, 9470, 9544
Lal, S. 3248
Lal Singh 9248
Lalita Batra 5298
Lalramnghinglova, J. H. 9561
Lalu, I. 8663, 8949
Lama, U. 2461
Lämås, T. 9387
Lamascese, N. 1676
Lamaty, G. 6439, 9802
Lamaux, E. 4551
Lamb, D. 3232, 3245
Lambardi, M. 4290, 5066, 6050
Lambert, F. 5135, 5289
Lambert, G. 7301
Lambert, M. J. 1708
Lambert, N. J. 7840
Lambert, W. D. 3118
Lamberti, G. A. 5253
Lambeth, C. 2225
Lambin, E. F. 7010, 9634
Lambrot, C. 4261, 9712
Lamers, J. P. A. 4101
Lamersdorf, N. 5241
Lamhamedi, M. S. 4615, 4849
Lamidi, M. 9799
Lamont, B. B. 3032, 6577, 8886
Lamotte, S. 5467
Lamppu, J. 7098
Lan, T. 7614
Lan, T. H. 7805
Lana, K. 8567
Lanaras, T. 6331
Lançås, K. P. 6277
Lancaster, R. 9309
Lance, K. 6236
Land, D. H. 3171
Land, S. B., Jr. 2533-2534
Landhäusser, S. M. 3700, 5141
Landi, S. 9140
Landmann, G. 1159, 3814, 3820
Landolt, W. 2879
Landry, L. G. 453
Landsberg, J. 7286
Landström, M. 5157, 9613
Lane, P. M. 1124
Lanford, B. L. 6935
Lang, A. R. G. 7661
Lang, B. K. 7524
Lang, H. P. 4267
Lang, R. H. 1040
Lang, U. M. 2
Lange, B. M. 3762
Lange, W. 8088
Lange, W. J. de 576
Langebartels, C. 3617, 3762
Langenhove, H. van 9334
Langer, E. R. 4243
Langerud, B. R. 1125
Langlais, D. 3111
Langlet, A. 5861
Langlois, C. G. 908
Langmead, C. 7625
Långström, B. 3183
Langvall, O. 9333
Láníčková, B. 6884
Lankey, K. 8280
Lanly, J. P. 3522
Lansac, A. R. 1114, 9083
Lantagne, D. O. 2419-2420, 2621
Lantheaume, F. 9434
Lanz, T. J. 6794
Laouali, G. 9473
Lapeyrie, F. 3148, 3155, 3771-3772, 8272
Lapierre, J. 1729
Lapietra, G. 6135, 6652
Lapinjoki, S. P. 2985
Laporte, N. 6230
Lapp, M. S. 4000
Lappegard, K. K. 5288
Lappi, J. 2706
Larbi, A. 8325
Lardon, S. 5861
Large, M. F. 2039
Larigauderie, A. 6432
Larionova, A. Ya. 4746
Larivière, S. 8358
Larocque, G. R. 1225-1226
Larsen, D. R. 4221
Larsen, J. B. 7755, 7813
Larsen, M. D. 1645
Larsen, S. W. 5743
Larson, D. W. 2440, 2936, 8699, 10135
Larson, P. R. 5924
Larsson, K. 2490, 6284
Larsson, S. 5772, 9133, 10032
Larue, P. 4072
LaRue, P. 4903, 10072
Larvik, D. A. 6139
LaSalle, J. 7492
Lascoux, M. 1419, 3717
Laskowski, R. 7901, 8798, 9700
Lasseur, J. 5869
Lassini, P. 3247
Last, I. 7547
Lasure, A. 6952
Lata, K. 429
Latham, R. E. 3058
Latham, W. G. 2971
Lathrop, R. 2790
Lathrop, R. G. 7280
Lathrop, R. G., Jr. 3510
Latif, M. A. 1001, 6173, 6177, 6975
Latiff, N. H. 7364
Latsague, M. 274
Latt, C. R. 5938
Lattanzi, E. 3473
Lattova, J. 467
Latysh, V. G. 8918
Lau, A. 5020
Laudelout, H. 3624
Laudermilch, G. 2894
Laughlin, G. P. 3442
Lauhanen, R. 3448
Laukkanen, H. 5404
Laura, V. A. 9440
Laurence, J. A. 1977, 3654, 5644, 6464
Laurent, C. 8940
Laurent, P. 3771, 5579
Laurent, T. E. 7918
Laurie, H. 531
Laurier, J. P. 6914
Lauten, G. N. 1059
Lauvergeat, V. 7375
Lauzon, L. 1372
Lavado Contador, J. F. 7849
Laval, K. 3255, 9759
Lavalle, C. 3515
Lavallée, R. 5749-5750
Lavee, H. 8885
Laven, R. D. 3947
Lavender, D. P. 4310
Lavender, E. A. 1439
Lavertu, D. 3434
Lavery, D. J. 7117
Lavi, U. 9028
Lavoie, C. 2127, 2688, 8149
Lavoie, N. 317
Lavola, A. 2880, 4665
Lavrinenko, N. N. 197
Law, B. E. 1343, 2691, 5204
Lawali, E. M. 8554
Lawesson, J. E. 3907
Lawler, S. H. 8356
Lawrence, A. 9
Lawrence, D. C. 5162
Lawrence, G. B. 7657
Lawrence, R. K. 7470
Lawrence, T. J. 8964
Lawrence, W. T. 1044, 1382, 3116
Lawrie, J. 2644-2645
Lawson, G. J. 9357
Lawson, M. 7609
Lawson, P. 8979
Lawson, S. 4900
Lawton, J. H. 7460
Lawton, R. O. 1250
Laxmi, V. 4123
Laxmi Rawat 8782
Layne, D. R. 1267
Layton, P. A. 1963
Lăzărescu, G. 8524, 9188
Lazareva, I. P. 9740
Lazzari, G. 8468
Lê, K. H. N. 6165

Le, T. C. 7035
Le Blanc, R. M. 3779
Le Brocque, A. F. 7043
Le Floc'h, É. 8420
Le Goff, N. 4153, 6186
Le Maitre, D. C. 1193
Le Men-Olivier, L. 2579, 8078
Le Mouël, J. L. 2081
Le Riche, E. A. N. 3206
Le Tacon, F. 3312, 3567, 3819, 4008, 5595
Le Thiec, D. 4473, 5325
Le Toan, T. 3516, 3520
Le Van Lanh 3244
Le Vine, D. M. 9635
Lea, P. J. 4562
Leach, M. 1634, 5033, 8536-8537
Leach, R. H. 3213
Leadem, C. L. 7728
Leakey, R. R. B. 1693, 4284, 5221, 6890
Leal, I. 7357
Lear, D. H. van 8501, 8708
Learn, G. H. 440
Leather, S. R. 5759, 7502
Leathwick, J. R. 7266
Leban, J. 8863
Lebedenko, L. A. 873
Lebedev, A. V. 5419
Lebel, J. 6814
Lebkov, V. F. 4388
Leblanc, J. M. 9981
Leblanc, R. M. 1156, 3782
Leborgne, N. 1893
Lebourgeois, F. 890
Lebreton, P. 5259
Lebrun, J. P. 1598-1600
Lebrun, P. 5037
Lechowicz, M. J. 387, 3978, 8126, 8819, 9666
Leckie, D. G. 248, 6995
LeClaire, A. M. 3491
Leclerc, D. 5840, 9492, 10090
Leclerc de Hauteclocque, H. 9403
Leclercq, P. A. 6438
Lecomte, H. 259, 4432
Ledant, J. P. 10068
Leder, B. 6121
Ledesma, M. 4951
Ledgard, N. 6670
Ledgard, N. J. 4174
Ledger, D. C. 3687
Ledig, F. T. 3306
Ledru, M. P. 2129, 3067
Leduc, A. 4787
LeDuc, S. K. 2507
Lee, B. C. 9008
Lee, C. H. 5266
Lee, C. L. 6401
Lee, C. S. 9312
Lee, D. R. 8416
Lee, E. H. 6497, 9744
Lee, H. 1238, 1240
Lee, H. J. 8656
Lee, H. K. 8748
Lee, H. S. 9240
Lee, H. S. J. 2008
Lee, J. 589, 3144, 5508
Lee, J. C. 7720-7721
Lee, J. J. 2795, 7071
Lee, J. K. 8747
Lee, J. M. 8208
Lee, J. S. 8239
Lee, J. W. 8727
Lee, K. H. 8748
Lee, K. J. 1642, 9302, 9311
Lee, K. Y. 440, 7720-7721
Lee, M. B. 8709-8710
Lee, M. H. 9783
Lee, M. S. 1811
Lee, P. 3483
Lee, P. K. D. 8049
Lee, S. H. 8742
Lee, S. K. 4095, 8326
Lee, S. M. 8346
Lee, S. S. 3148, 4847
Lee, S. W. 752, 2192
Lee, S. Y. 8747, 8878, 10038
Lee, T. Y. 4835
Lee, W. C. 87
Lee, W. G. 4756, 6560
Lee, W. K. 8849
Lee, W. Y. 8205
Lee, X. H. 3534
Lee, Y. H. 8795
Leech, J. W. 6247, 6796
Leede, B. de 8471
Leeks, G. 5830
Leemet, A. 9378
Lees, B. G. 1856
Lees, J. C. 4172
Leeuw, P. N. de 7148
Leeuwen, N. F. M. van 2866
Lefebvre, C. 4520
Lefebvre, P. A. 4085
Lefranc, M. 5429
Lefroy, T. 9283
Legesse, N. 5278
Legg, M. H. 6378
Leggat, K. 247
Legrand, C. 2152
Legrand, I. 3021
Legrand, M. 2087
Lehmann, J. 980, 8422
Lehtilä, K. 4731
Lehto, T. 2616, 3010, 3161-3162
Leigh, E. G., Jr. 5932, 6509
Leigh, J. H. 12
Leighton, M. 1738, 4109, 5162
Leimgruber, P. 3198
Leinhos, V. 5562
Leininger, T. D. 3173
Leinonen, I. 9360
Leinonen, K. 9427
Leishman, M. R. 2938
Leitão, M. M. 9776
Leitao, M. V. B. R. 3736
Leitgeb, E. 4304
Leith, I. 5317
Leith, I. D. 2008, 2882, 2887
Lejdebro, M. L. 5509
LeJeune, K. D. 1039
Lejeune, P. 259, 4359
Lejsalová, O. 3304
Lekakis, J. N. 4614
Lele, M. 6806
Lelu, M. A. 2584, 3401, 6894, 9032
Lemay, S. 9597
LeMay, V. 6820
LeMay, V. M. 1643, 4392
Lemcoff, J. H. 6306
Lemée, G. 6552
Lemettinen, M. 7033
Lemin, R. C., Jr. 1774
Lemke, J. 1278, 3474-3475
Lemmens, R. H. M. J. 756
Lemmon, C. R. 2330
Lemoine, B. 4433, 4882
Lemoine, G. G. 3515
Lemoine, M. 92
Lemos-Espinal, J. 6696
Lempériere, G. 652, 2382
Lenhart, J. D. 3167
Lenhart, S. M. 8361
Lenihan, J. M. 7870
Lenz, L. W. 7246
Lenz, R. J. M. 2813, 8450
León, R. 815
León H., W. J. 6428
Leonard, E. 2522
Léonard, J. 5426
Leonardi, S. 1330, 3607, 8250
Leone, M. 736
Leone, V. 364
Leone, V. M. 9899
Leont'ev, A. K. 8759
Leopold, D. J. 614, 3879, 6898
Leopoldo, P. R. 8378
LePage, P. 163
Lepistö, A. 5836
Lepistö, M. 9972
Leplé, J. C. 4812
Lepoittevin, J. P. 1235
Leporatti, M. L. 3473
Lepper, P. 2566
Leprince, F. 5576
Lepš, J. 1817
Lersten, N. R. 2018, 2967, 8067
Lertzman, K. P. 542, 7332
Leslie, A. D. 2547
Leslie, D. M., Jr. 7596, 8367
Lesney, M. S. 10003
Lessard, V. 4431
Lestari, S. B. 6448
Lester, D. T. 64, 3984
Lesueur, D. 598, 9069
Letchford, T. 9503, 9508
Leth, S. 5351
Letourneau, D. K. 1473
Letouzey, J. 4638, 4730, 5519
Lettere, M. 5700
Leuciuc, A. 9188
Leung, J. W. 1770
Leuning, R. 6468
Leuschner, C. 4661, 8525
Leuven, F. van 5563
Lev-Yadun, S. 2957, 4658, 5421, 6413
Levai, P. 9636
Levandowski, D. W. 260
Leverenz, J. W. 8109
Levesque, R. 1024
Lévieux, J. 3186, 4882, 5757
Levin, R. A. 10052
Levine, E. R. 33, 1382, 3116
Levings, S. C. 4575, 4577, 6357
Levinson, B. 6264
Levis, S. 507
Levitan, J. 4444
Levitt, D. G. 7059
Lévy, A. 4038, 8309
Lévy, G. 2830, 3811, 3819
Levy, P. E. 9357
Lewandowski, A. 3976, 4003, 5483, 5485, 7209, 8207
Lewark, S. 823
Lewinsohn, D. 5661
Lewinsohn, E. 452, 3399, 5661, 6484
Lewis, A. C. 8499
Lewis, A. M. 5947, 7060
Lewis, G. P. 8901, 8960-8961, 8971
Lewis, J. D. 1881, 4696, 6619
Lewis, K. L. 4367
Lewis, M. R. L. 7617
Lewis, N. G. 2019, 8101
Lewis, P. O. 7358
Lewis, R. 152
Lewis, W. M., Jr. 8393
Lewitt, D. W. 1508
Leyva, K. J. 9152
Lezberg, A. 717
Li, B. 1830
Li, B. H. 8069
Li, C. 9599, 9650
Li, C. Y. 3621, 7388
Li, C. Z. 1053, 8745, 8770, 9599, 9650
Li, G. X. 5684
Li, H. 2986, 5399, 8094
Li, J. 5705, 8505
Li, J. H. 2053, 6401
Li, J. K. 8800
Li, J. Y. 9058
Li, L. C. 7233
Li, L. S. 9169
Li, M. H. 7373
Li, P. 3124, 4828, 8566
Li, P. J. 690
Li, S. W. 6401
Li, S. Y. 7618
Li, T. X. 8244
Li, X. J. 4270
Li, X. W. 4444
Li, X. X. 2358
Li, Y. D. 9911
Li, Y. H. 2196
Li, Y. W. 5931
Li, Z. L. 6401
Li, Z. M. 4463
Liang, C. F. 670
Liang, N. 3783
Liang, Q. W. 638, 2548
Liang, S. 5206
Liang, S. X. 2358
Liang, W. P. 2979
Liang, X. T. 9807
Liang, Y. 3669
Libby, W. J. 3014, 4263, 9047
Liberman, M. 3757
Libiaková, G. 8191
Libot, F. 8911
Licht, L. A. 3269
Lichtenthaler, H. K. 2075, 2079, 2085
Lichtwardt-Zinke, K. 120
Liddle, D. L. 10129
Liddle, M. J. 3326
Lidholm, Å. 5516
Liebhold, A. M. 636, 2333, 9160
Liebold, E. 9864
Liechty, H. O. 4208, 5172
Lieffers, V. J. 1757, 3484, 4172, 4680, 5141
Liegel, L. H. 953
Liengsiri, C. 9059
Liese, W. 398, 6414
Liesebach, M. 7540
Lieutier, F. 1934, 3807
Liew, T. S. 9456
Lightbody, K. E. 308
Likens, G. E. 319, 1219, 4195, 6261, 7101
Lilieholm, R. J. 1870
Lilja, A. 5619-5620, 9088
Lilja, S. 3450
Liljenberg, C. 3759
Lill, J. 1509
Lim, A. L. 476, 7158
Lim, G. 6313
Lim, J. H. 2192
Lim, Y. A. 8688
Lima, D. F. 9907
Lima, J. B. L. 2422
Lima, J. T. 9583
Lima-Ayres, D. 6838
Limanovich, V. E. 2643
Limarenko, I. V. 7921
Lin, C. H. 2563
Lin, D. 3998
Lin, G. H. 465, 2836, 3609
Lin, H. 8243
Lin, L. Y. 9036
Lin, N. S. 5671
Lin, T. P. 2563, 3379, 3739, 4835, 5531
Lin, Y. 6059
Lin, Y. G. 2253
Lin, Z. Q. 8833
Lind, T. 3527
Linda, S. P. 5469
Lindau, C. W. 1949
Lindberg, S. E. 2870, 8852
Linddal, M. 2483
Linde, C. 1452, 5622, 5632, 8291
Lindegren, J. 2517, 4236, 5973
Lindeman, G. V. 8181, 10033
Lindén, H. 4061, 9317
Lindenmayer, D. 5020
Lindenmayer, D. B. 1525, 2388, 2978, 3194, 4129, 4967, 5818-5819, 8363-8364, 9216, 9225, 9230
Linder, E. T. 9214
Linder, H. P. 530
Linder, S. 1610, 2035, 4174, 6797
Linderman, R. G. 5271
Linderson, H. 5916
Lindevall, B. 6249
Lindgren, D. 824, 2107, 3367, 4170, 5500, 5509, 9969
Lindgren, K. 3367
Lindgren, M. 1461
Lindner, J. 5045
Lindorf, H. 4622
Lindquist, J. L. 4357
Lindroos, A. J. 7879
Lindroth, A. 2831, 3335, 3604, 4080, 7061, 8811-8812, 9345
Lindroth, R. L. 2318, 5711, 8683, 9192
Lindsay, J. M. 7591
Lindskog, A. 6446
Lindström, A. 5120, 6087, 9477, 9506

Lindstrom, O. M. 800, 6143, 9558
Lindtner, J. 5832
Line, M. A. 5365, 7763
Lineberger, R. D. 2588
Lineres, M. 3147
Lingappa, S. 2317
Linhart, Y. B. 5821
Linit, M. J. 9164
Linke, J. 6923
Linna, A. 2765
Linnell, J. D. C. 6694
Linscheid, M. 1187
Liò, P. 8227
Liogier, H. A. 1336
Lipas, E. 5063
Lipman, D. 2772
Lippert, M. 4561
Lippet, L. A. 9076
Lippi, M. M. 668, 6330
Lippu, J. 5183
Lipscomb, D. J. 1079
Lipsky, Z. 8452
Lisci, M. 3375
Lisk, D. J. 9748
Liška, I. 3750
Lišková, D. 3398, 6486-6487, 8925-8926
List, P. 1647, 7701
List, P. C. 8399
Litinskiĭ, P. Yu. 9740
Littell, R. C. 8507
Little, C. H. A. 3127, 4659, 5403, 5562
Little, K. M. 7778, 7786
Little, R. L. 1416, 10161
Little, S. J. 8324
Littvay, T. 5950
Litvak, M. E. 4681
Litz, R. E. 5101, 7748
Liu, C. J. 7649, 9086, 9573
Liu, G. 2615
Liu, H. L. 3073
Liu, H. M. 8984
Liu, H. Y. 2253
Liu, J. 2122, 2707, 5148, 6990, 7681
Liu, J. C. 1126, 9687
Liu, J. G. 3279, 5817
Liu, J. P. 2707, 5148
Liu, Q. H. 5965, 6334, 6539
Liu, S. 8752
Liu, S. J. 9058
Liu, S. R. 7964
Liu, S. Y. 8752
Liu, T. P. 3258
Liu, W. 913, 9598
Liu, W. W. 8226
Liu, X. 4710
Liu, X. C. 5931
Liu, X. D. 5841, 10082
Liu, Y. 4260
Liu, Y. X. 4583
Livingston, N. J. 1609, 3000
Livingston, W. H. 616
Livsey, S. 4169
Liyanage, M. de S. 3994
Ljungman, L. 3340
Ljungström, M. 8594
Llamas, F. 6403
Llamas-Apolinar, C. 8394
Llambrich, E. 1277
Llauradó, M. 5307
Lleras, E. 9880
Llerena V., F. A. 7556
Llewellyn-Smith, R. 3993
Llinares, F. 1897
Lloyd, A. D. 3127, 5562
Lloyd, C. R. 7679
Lloyd, F. T. 6128
Lo Gullo, M. A. 3613, 7068
Locci, R. 5668, 5670, 9123
Löchelt, S. 1424, 9988
Lock, J. E. 340
Lockaby, B. G. 2891, 4053, 7270
Lockow, K. W. 999, 8713
Lockwood, M. 3533, 7017
Lodenius, M. 4541
Lodge, D. J. 1065, 1067-1068, 1071-1072, 1892, 4532, 6292
Lodge, T. E. 1594
Lodhiyal, L. S. 1941
Loehle, C. 3283, 7863
Loeschen, V. S. 6493
Loewe M., V. 6385
Loewenstein, E. F. 9055
Loewenstein, N. J. 2624
Löffler, H. 779, 5949, 6003, 7021
Löffler, S. 8847
Löfgren, B. 9613
Löfqvist, J. 7504
Löfstedt, C. 9153
Loft, E. R. 10065
Loftis, D. L. 2474
Logan, J. A. 9151
Logan, J. W. M. 2308
Logiurato, A. 8611
Lognay, G. 1445
Loh, C. S. 8583
Loh, D. K. 1622
Lõhmus, K. 7893
Lohrey, R. E. 6165
Lohrie, K. 6457
Loidi, J. 3908, 3928, 4772
Loiselle, B. A. 4923
Loiskekoski, M. 2484
Lojan Idrobo, L. 2551
Lokesha, R. 70
Lokmal, N. 7363, 7742
Lombardi Indacochea, I. 6286
Lomic, P. V. 5715
Lomsky, B. 2878
Lonardo, V. di 4021, 5340, 5510, 6020
Lonergan, S. C. 7835
Long, C. E. 68, 4344, 8644
Long, C. M. 5090
Long, C. R. 9023
Long, J. N. 8654
Long, S. L. 7656
Long, S. P. 1969, 5415
Longa, M. A. 3776
Longauer, R. 561
Longerich, R. S. 10151
Longino, J. T. 3091
Longman, K. A. 554, 3042, 4284, 5933
Longpré, M. H. 4361, 9986
Łonkiewicz, B. 899
Lönneborg, A. 9087
Lönnstedt, L. 3354, 5215, 9647
Lonsdale, W. M. 1761, 8641
Lontchui, P. 4594
Loomis, J. 3533, 7017
Loomis, J. B. 10065
Loomis, S. 2782
Loope, L. 4480
Loope, L. L. 7527
Loopstra, C. A. 5506
Loosveldt, P. 6443
Lopes, A. 3516, 9635
Lopes, C. R. 5533
Lopes, J. do C. A. 6180
Lopes, M. A. 3115
Lopez, A. 4551
López, C. 1496
Lopez, J. 7362
Lopez, J. A. 9954
López, M. A. 540
López, M. O. 1458
López Arias, M. 7817, 8377
Lopez-Llorca, L. V. 2258
López Márquez, J. A. 1321
López Mesa, M. O. 1458
López-Soria, L. 477
Lopinto, M. 6634
Loppi, S. 3838
Lops, F. 2273
Lopushanski, S. M. 1318, 9870
Lorea Hernández, F. G. 6517
Lorenc-Plucińska, G. 1463, 7181-7183, 7188
Lorence, D. H. 7237
Lori, G. A. 8305
Lorimer, C. G. 27, 2692, 3118, 3432
Lorio, P. L., Jr. 8338, 10056
Loris, K. 9687
Lorković, Z. J. 7368
Lot H., A. 7264
Lott, R. H. 6513
Lou, H. S. 5931
Loubry, D. 6388
Loukaci, A. 8078
Louman, B. 4413
Loumeto, J. J. 8534
Loureiro, A. M. 8612
Lousã, M. 7288
Loustau, D. 700-701, 9712
Loutrel, A. 9659
Louw, W. J. A. 2514
Lovato, P. E. 5593
Lovatt, J. C. 964
Love, E. 9258
Loveland, T. R. 7011
Lovelock, C. E. 434, 1287
Lovett, G. 2790
Lovett, G. M. 319, 2865, 6261
Loveys, B. R. 6034
Lövgren, L. 7496
Low, C. B. 4817-4823, 4826, 8188
Lowe, A. T. 1135
Lowe, J. J. 4383
Lowe, K. F. 6729
Lowe, R. G. 9009
Lowe, W. J. 4045, 9107
Lowell, E. C. 1989
Lowell, K. 243, 4451
Lowell, K. E. 6235
Lowenfeld, R. 5520, 9052
Lowery, B. B. 10028
Lowery, R. 9502
Lowirakorn, S. 5035
Lowman, M. D. 536
Lowore, J. D. 2689
Lowrance, R. 5346
Lowry, J. B. 1821
Lowry, J. B. C. 1821
Loxdale, H. D. 5696
Loyn, R. 5020
Lozano, N. B. de 492
Lozano-C., G. 492
Lozano Contreras, G. 1327
Lozano-Garcia, D. F. 7851
Lozhkin, A. V. 3289
Lozupone, G. 8876
Lu, A. M. 2053, 7166
Lu, C. 5931
Lu, L. P. 8243
Lü, M. Z. 8221
Lu, P. 4512, 5279
Lu, W. D. 4583
Lu, Y. C. 8800
Lucas, D. E. 3824
Lucas, P. H. C. 7588
Lucas, P. W. 1230, 5327, 8049
Lucas, R. M. 6225
Lucchese, F. 3074
Lucci, S. 6118, 7782
Lucero, D. 9512
Luckman, B. H. 10162
Lucot, É. 1935
Lucot, E. 5280
Lüdders, P. 2106
Lüdeker, W. 1036
Ludemann, T. 9939
Ludlow, A. R. 4218
Ludlow, M. M. 7197
Ludwig, J. A. 9002
Luganskiĭ, N. A. 1962
Lugardon, B. 5379
Lughadha, E. N. 6415
Lugo, A. E. 1066, 1070, 1219, 1309, 1938, 3122, 4966
Lugus, O. 9378
Lührte, A. von 4524, 10159
Luis, E. de 1384
Luis-Calabuig, E. 8433
Luisi, N. 608, 8119
Lukáč, T. 45
Luken, J. O. 1332, 2063, 5454
Lukens, D. L. 5958
Lukić, N. 4404
Lukina, N. V. 1920, 4568, 7094
Lukumbuzya, T. K. 885
Luk'yanov, O. A. 8370
Luk'yanova, L. E. 8370
Lull, J. 3676
Lulli, L. 303, 987
Luloff, A. E. 7703
Lumaret, R. 8244
Lumini, E. 2406, 9079
Lumis, G. 1981
Lumley, T. C. 9072
Lumme, I. 9858
Luna, A. M. 2477
Luna Vega, I. 7278
Lund, H. G. 1850
Lund, L. J. 3690
Lundahl, L. 4471
Lundberg, A. 2905
Lunderstädt, J. 1480, 2344, 5685
Lundgren, A. L. 4149
Lundgren, U. 10044
Lundin, L. 4932
Lundkvist, H. 770
Lundkvist, K. 1422, 3717
Lundmark, T. 6496
Lundoh, L. 91, 6887
Lundquist, J. E. 2282, 8666, 8986-8987
Lundquist, P. O. 3015
Lundqvist, L. 2937, 3560, 9485
Lundström, U. S. 292, 344
Lung-Escarmant, B. 9127
Lunnan, A. 2784
Luo, W. X. 2545
Luoga, E. 6974
Luoga, E. J. 5058
Luokkanen, S. 1955
Luoma, D. L. 5603, 6640
Luoma, S. 5324
Luomajoki, A. J. 9872
Luque, S. S. 7280
Lura, C. L. 8791
Lushnikov, A. A. 6351
Lusk, C. H. 7258
Lust, N. 6804, 7562, 8523, 8622, 8668, 8722, 9307
Lutsenko, T. N. 7977
Lüttge, U. 2990, 4700
Luttinger, N. 5376
Lütz, C. 3652, 6584
Lutz, G. 3281
Lutz, J. 1055
Luukkanen, M. O. 5981, 6001, 6022, 6574
Luwe, M. W. F. 8165
Lux, H. 8099
Luxmi Chauhan 4673, 9789
Luzanov, V. G. 2642
Lyly, O. 7785
Lynch, D. L. 56
Lynch, D. M. 7505
Lynch, J. P. 6263
Lynch, K. D. 834, 2668
Lynch, T. B. 5178
Lynham, T. J. 4610
Lyons, D. B. 678
Lyons, M. N. 7707
Lyons, T. J. 7844
Lyr, H. 6275
Lyytikäinen, P. 2367, 10049
M. D. Faizal, A. 6939
Ma, C. G. 9426
Ma, H. 8381
Ma, J. S. 7265
Ma, L. Q. 3669
Maarel, E. van der 3307
Maaren, A. van 807
Maas, P. J. M. 6521
Maass, D. I. 4172
Maass, J. M. 4529, 6648, 8756
Mabberley, D. J. 2039
Mabelis, A. 1519
Mabry, T. J. 8077
McAfee, B. J. 4000
McAlister, R. H. 2900
McAllister, M. 1872
McAlpine, R. S. 6957, 7387
McAndrews, J. H. 2124, 7268
McAneney, M. P. 9199
McAninch, J. B. 1520
Macaskill, G. A. 2263
McAuslane, H. J. 674
McBeath, C. 880
McBride, R. A. 1753
McCaffrey, D. 1012
McCaffrey, T. M. 8731
McCain, A. H. 2284

McCain, D. C. 1109
McCanny, S. J. 8819
McCarthy, B. C. 1911, 3107
McCarthy, E. J. 7546
McCarthy, M. 5020
McCarthy, M. A. 2509, 8726
McCaughey, J. H. 801
McCaw, W. L. 2919
Macchia, M. 2561
Macchiavelli, R. E. 72
McClain, K. M. 4331
McClain, W. R. 3179
McClaugherty, C. 6285
McClaugherty, C. A. 9722
McClean, C. 8735
McClure, F. A. 2452
McComb, J. A. 1695, 3138
McComb, W. C. 4902, 9211
McCombie, P. F. 10145-10146
McConnaughay, K. D. M. 3547
McConnell, J. L. 4045
McCormac, F. G. 9315
McCormack, M. L., Jr. 1762, 2650-2651
McCormick, L. H. 942, 1392, 4033
McCown, B. H. 5724
McCoy, E. D. 4907
McCoy, S. 8887
McCracken, A. R. 2276
McCracken, F. I. 3173
McCrea, S. 8456
McCreary, D. D. 1720
McCreight, R. 1342, 4174
McCullough, D. G. 1482, 9195, 10053
McCullough, D. R. 4911
McCune, B. 8835
McCutchen, E. L. 6684
McDaniel, P. A. 3057
McDavid, D. A. J. 1695
McDermott, J. B. 169
McDermott, M. 5899
MacDicken, K. G. 3302
McDonald, A. J. S. 1148, 2854, 3803
Macdonald, B. C. 262
McDonald, D. 271, 2978
MacDonald, G. B. 4407
MacDonald, G. M. 1372
McDonald, J. A. 7571
McDonald, K. 2755
McDonald, K. C. 1029
MacDonald, L. H. 8380
McDonald, M. A. 6289
MacDonald, N. W. 1091
McDonald, P. M. 1756, 2946, 4329, 4343, 6163
McDonald, S. 1294
MacDonald, S. E. 1722
Macdonald, S. E. 3484
MacDonald, S. E. 6903
McDonald, S. K. 5659
McDonald, S. S. 8900
McDonnell, M. J. 5359
McDowell, R. E. 970
McDowell, W. H. 1072, 2789, 4532
Macedo, D. S. 1173
Macedo, J. F. 2147
McElroy, H. L. 4986
McFadden, J. P. 1091
MacFarlane, D. D. 9644
McFarlane, J. W. 678, 9186
McGarigal, K. 9211
McGee, C. E. 2474
McGilvray, J. M. 5127
McGimpsey, J. 1806
McGinley, M. A. 5272
McGinnis, W. J. 732
McGlone, M. S. 3886, 4765
McGovern, R. J. 2288
McGrath, D. A. 3443
McGrath, M. J. 687
McGraw, J. B. 8331
McGregor, J. 8417
McGuire, A. D. 1834, 3551
McGuire, M. T. 2496
McGurk, B. J. 8005
Machado, R. 6872-6873
Machado, R. D. 2038
Macharski, P. 5306
McHenry, T. J. P. 3354
Machin, P. J. 3038
Machon, N. 5429
Maciaszek, W. 891
McIlroy, J. C. 10063
McInnes, A. 6615
McInnes, P. F. 3214
McInnis, B. G. 4581, 8623
McIntyre, N. E. 10075
McIntyre, S. 6513, 7294
McIver, E. E. 6527
McIvor, J. G. 9241
Mackay, A. W. 4763
McKay, C. R. 9293
McKay, H. M. 3558
MacKay, J. 3124
MacKay, J. J. 8226
McKean, M. 4463
McKeand, S. E. 3125, 4174, 4260, 5112
McKee, C. W. 4593
McKee, K. L. 3937, 5386, 6575
McKee, T. C. 9827
McKellar, D. S. 4277
McKelvey, K. S. 3145
Mackengo, S. J. 7576
McKenney, D. 4456
McKenney, D. W. 4967
McKewan, K. L. 9717
Mackey, A. P. 8828
Mackey, B. G. 2155, 3896
McKey, D. 8487
Mackie-Dawson, L. A. 1439, 2857, 6897
McKillop, W. L. 3532
McKinley, C. R. 1688
McKinnell, F. H. 3354, 4168
McKinney, D. 5402
MacKinnon, A. 257
MacKinnon, D. S. 5829
McKinnon, M. L. 7442
McKinsey, D. 2913
MacKnight, D. 1872
MacLachlan, W. 4897
McLane, W. 5793
McLane, W. H. 5785, 9199
Maclaren, J. P. 4597
McLarnon, D. 7117
Maclauchlan, L. E. 8342
McLaughlin, D. L. 1591
McLaughlin, J. A. 946
McLaughlin, S. B. 1963, 5915, 7199
McLaughlin, W. J. 4425, 6142
McLawrence, A. S. 9315
MacLean, D. A. 4224
MacLean, R. 2418
MacLean, S. F., Jr. 2363, 4032
MacLellan, P. 4788
MacLennan, L. 2456, 7686, 7708
McLeod, A. 1505
McLeod, A. R. 4189, 4559, 4570-4571, 4574
McLeod, D. E. 6190
McLeod, K. W. 6483
MacLeod, R. 7998
McLoughlin, S. 8144
McMahon, B. G. 3999
McMahon, C. K. 1768
McManus, M. L. 636, 2324, 9160
MacMillan, D. C. 2694
Macmillan, D. C. 3531
McMillan, D. R. 8103
McMinn, A. 3885
McMurtrie, R. E. 1057, 2697, 6797
McNab, W. H. 3350
McNabb, D. H. 1089
McNamara, S. 1707
McNeely, J. A. 4125
McNulty, S. G. 2506, 7660
Macomber, S. 4444-4445
Maconochie, J. R. 3707
McPherson, E. G. 1588, 3284, 6239
Macpherson, G. 7623
McPherson, G. D. 9903
McPherson, G. R. 1184
MacPherson, J. 4576
Macqueen, D. J. 2210
McQuillan, P. B. 7417
Macrae, A. 5443
McRae, D. J. 4610
Macrì, F. 9845
McRoberts, R. E. 4437
McSeveny, T. M. 4693
McShea, W. J. 3198
McSweeney, K. 8869
MacSweeney, P. B. 9315
McSwiney, C. P. 4532
McTague, J. P. 233, 9962
McWilliam, A. L. C. 3736
McWilliams, M. G. 4299
McWilliams, W. H. 2731
Maczuga, S. 9191, 9199
Madalageri, M. B. 1690
Madani, T. 5869
Madar, Z. 6629
Maddelein, D. 6941, 8999
Madden, J. L. 5399, 5738, 8094
Madeira, M. 7913, 8026, 8048, 8767
Madej, T. 5618
Madgwick, H. A. I. 3734, 4817
Madiwalar, S. L. 10114
Madiwalar, S. L. K. 10114
Madron, L. D. de 9533
Mądry, W. 25
Madsen, H. B. 8016
Madsen, J. E. 3071
Madsen, P. 3545, 6920, 7773
Madsen, S. F. 991, 6945
Maduakor, H. O. 8801
Mäenpää, E. 6494
Maesato, S. 9633
Maestrojuan, G. 8266
Maetô, K. 658
Maeto, K. 4894, 7481, 10037
Maetzke, F. 951, 6181
Maffei, M. 6516
Magallanes-Cedeno, M. E. 1688
Magallón-Puebla, S. 511
Magan, N. 4570
Magee, P. 5188
Magel, E. 2981
Maggi, A. 1443
Maggs, J. 5248
Maghembe, J. 6649
Maghembe, J. A. 3256, 8176
Magherini, R. 5062
Magill, A. 326
Magill, A. H. 9731
Magill, A. W. 1646
Maginnis, S. 4441
Magnani, F. 5424, 7069
Magnani, G. 2561
Magnanini, A. 9907
Magnin, F. 9950
Magnin, T. 3764
Magnuski, K. 952
Magnussen, D. 3133, 8216
Magnussen, S. 794, 3135, 3977, 8566
Magnusson, C. 1495
Magnusson, T. 2808, 9683
Maguire, D. A. 1995, 4500, 8651
Maguire, L. A. 9210
Mahajan, V. K. 7582
Mahanti, N. 9108
Mahapatra, L. K. 1630
Mahato, D. 1664
Mahé, F. 4586
Mahendra, A. K. 8555
Mahendrappa, M. K. 2490
Mahesh Bhandari 582, 2569
Maheshwari, J. K. 747
Maheut, J. 9321
Mähönen, M. 2484
Mahoney, J. M. 6507
Mahoney, S. P. 687
Mahto, D. 2416
Mahunnah, R. L. A. 2676
Maia, D. C. 5611
Maia, J. G. S. 9838
Maía, J. L. da S. 2364
Maidou, E. 6439, 9802
Maier, C. T. 2330
Maier, J. 6596
Mailander, M. P. 9643
Maillard, D. 1512, 7525
Maillard, P. 1257
Maillet, A. 244
Mailly, D. 4939
Mainardi Fazio, F. 5917
Maini, J. S. 1012
Mair, M. 1886
Maire, G. 3281
Maire, M. H. 1512
Maisels, F. 4737, 9218
Maistre, M. 4317
Maitelli, G. T. 3736
Maithani, G. P. 57
Maiti, S. 3272
Maitre, D. C. le 1193
Maître, H. F. 6106, 9609
Maity, S. 865, 9790
Majcen, Z. 2629
Majdi, H. 2614, 7749, 8047, 9684
Majeed, A. 9591
Majer, J. D. 662
Majewski, P. 9941
Majid Cooke, F. 6858
Major, J. E. 1723-1724, 1726-1728, 9851
Majunke, C. 4883, 6651
Makarova, T. D. 7091
Mäkelä, A. 228
Mäkelä, R. 6455
Makeschin, F. 1105, 6554
Makihara, H. 4040
Mäkinen, M. 1522
Mäkipää, R. 5456
Makkar, H. P. S. 1244
Makoni, J. 6904
Mąkosa, K. 3461, 4089
Makua, C. 4973
Mal, B. 5558
Malabika Ray 9404
Malagnoux, M. 3970
Malaisse, F. 8940
Malajczuk, N. 4006, 5579, 5590, 5609-5610, 6323, 6780, 8275
Malan, E. 9835
Malan, F. S. 575, 4633
Malandrino, P. 5852
Malanson, G. P. 1376, 3894
Malcolm, D. C. 4174
Malcolm, J. R. 4748
Maldonado, A. M. 816
Maldonado Ruiz, J. 8991
Malentacchi, L. 111
Malerba, M. 6499, 7179, 8104
Maley, J. 2130, 3067
Malgras, D. 3299
Malik, N. 130
Malimbwi, R. E. 6974
Malinen, J. 2706
Malingreau, J. P. 3522
Malinowski, H. 7499
Maliondo, S. M. S. 7576
Malkina, I. S. 3788
Mälkönen, E. 2616, 5109, 7953
Mallavarapu, G. R. 8079
Mallet, B. 6647, 9069
Mallik, A. U. 3866, 6741
Mallona, M. A. 3438
Malmer, A. 2908-2909
Maloney, D. C. 5253
Maloupa, E. M. 5104
Malphettes, C. B. von 5737
Maltamo, M. 9584
Malvolti, M. E. 5554
Małys, L. 952
Malyshev, L. I. 1353
Malyugin, T. T. 190
Mamaev, V. V. 7155
Mambriani, A. 3247
Mamikhin, S. V. 6327
Mamoun, M. 5575, 5613
Man, G. 8604
Manak, D. 1861
Manan, S. 914
Manandhar, N. P. 3471
Manathuragimath, B. B. 1663, 1672
Manaturagimath, B. B. 1663, 1672

Mandal, A. K. 2448, 3140, 5550, 9443
Mandal, L. 8676
Mandal, S. 4650
Mandal, T. 8676
Mandallaz, D. 370
Mandang, Y. I. 414, 6407
Mander, U. 8154
Manders, G. 5502, 8231
Manders, P. T. 7594
Manderscheid, B. 6332
Manderscheid, R. 449
Mandokhot, A. M. 8303
Manes, F. 5341, 8608, 8935
Manetas, Y. 2047, 7027, 7161
Manetti, M. C. 8658, 8665
Manfredi, V. R. 7992
Manga, T. 2542
Manger, K. 9431
Mangini, A. 4045
Mani, P. 10088
Manian, K. 9568, 9682
Manian, S. 3152
Maniates, M. 1013
Manicone, R. P. 8119
Maniero, T. G. 2865
Manish Mishra 840, 846-847, 858
Manivanh, V. 8409
Manjit Singh 2161, 2209, 2593
Manjunath, B. E. 3370
Man'ko, Yu. I. 8941
Maňkovská, B. 5329, 9745
Manley, P. N. 4901
Mannan, R. W. 3207
Mannes, F. 6256
Manning, C. R. 6069
Manning, J. C. 8904
Mannonen, L. 438
Manoĭlenko, K. V. 6839
Manokaran, N. 8183
Manrubia, S. C. 5466
Mansberger, R. 245
Mansfield, T. A. 1970, 3022, 5327
Mansour, S. R. 2232, 5588
Mansur, I. 4957
Mansuri 3237
Mantell, S. H. 2966
Mantha, B. K. 1060
Manu, A. 3275, 8491
Manuel, T. M. 5213
Manville, J. F. 5756
Manwiller, F. G. 2027
Manzur, A. 3929
Mao, A. A. 3084
Mao, L. S. 10156
Mapaure, I. 6535
Maplesden, F. 1635
Maplesden, F. M. 4243
Marais, M. 669
Marañón, T. 7298, 7305
Maraun, M. 7910
Marca, O. la 280, 3468, 8724
Marcar, N. E. 1115, 6620
Marceau, D. J. 2752-2753
Marcelli, A. R. 144
Marchal, D. 9337
Marchena, J. A. 219
Marchenko, Ya. I. 10055
Marchetti, M. 6373, 8876
Marchisio, C. 4043
Marcker, K. A. 7376
Marcone, C. 5668, 5670
Marcos, F. 2893
Marcozzi, M. 370
Marden, M. 4525, 4940, 4942
Mardiris, T. A. 683
Marechal, J. 2152
Marek, M. V. 5408
Maresi, G. 9126
Marfà, O. 9718
Margolis, H. 5137-5138
Margolis, H. A. 317, 4477, 4939, 5702, 6324
María Vázquez, F. 1321
Mariani, P. 458, 2055, 6421
Marie, D. 5092
Marigo, G. 1936
Mariko, S. 8768
Marimuthu, T. 2295
Marín, A. 5364
Marín Ch., D. 1370
Marina, N. V. 1962
Mariotti, A. 1361, 5240
Mariotti, D. 7379
Marisa Puagchantuk 7567
Marius, C. 8760
Marjenah 4845
Mark, A. F. 1386, 3088
Mark, L. C. 5826
Markewitz, D. 5355
Markham, K. R. 8082
Markkola, A. M. 6295
Markó, V. 9165
Marks, B. 4133, 8365
Marlats, R. M. 6735, 10108
Marmeisse, R. 8284
Marnasidis, A. 7106
Marohasy, J. 7789
Marquardt, P. E. 6605
Marque, C. 9063
Marques, R. 7074
Marquez, G. 9172
Marquez, J. 5380, 7748
Márquez, O. 4307
Marquina, J. L. 6735
Marquis, R. J. 4908
Marra, J. L. 4496
Marriott, C. A. 3478
Marroquín de la Fuente, J. S. 1329
Marsac, G. T. de 8720
Marschner, H. 8890
Marschner, P. 7920
Marsh, A. 8531
Marsh, J. 748
Marsh, M. 5250
Marsh, S. E. 1860
Marshall, J. D. 1274, 2834, 3800, 4004, 4513, 4707, 8198
Marshall, L. D. 10053
Marshall, M. 6207
Marshall, P. 6820
Marshall, P. L. 1225-1226, 1643, 3489
Marshall, V. G. 3591, 4028, 4301
Marsili, A. 7795
Marsinko, A. P. 3528
Marsoem, S. N. 1151, 4547
Martel, M. 9619
Martell, D. L. 4606
Martens, E. 16
Martijena, N. E. 2146
Martikainen, P. 4027
Martikainen, P. J. 7762, 7783
Martín, A. 1114, 1824, 6291, 9083
Martin, C. A. 4843
Martin, C. E. 6493
Martin, C. W. 4578
Martin, F. 2248, 3758, 5570, 5579, 5595, 7648, 8273
Martin, H. A. 3885
Martín, J. 1746, 1826
Martin, L. 2129
Martin, M. A. 5716
Martín, M. P. 3696
Martin, M. P. 5701
Martin, R. R. 5006
Martin, T. A. 1272
Martin, T. E. 690
Martin, W. 5416
Martín Bernal, E. 9147
Martín de Agar, M. P. 8407
Martín de Agar, P. 3871
Martín Hernández, A. 5979
Martin-Orozco, E. 7177
Martinelli, L. A. 4380, 9594
Martinez, C. C. 2782
Martínez, E. 7244
Martinez, H. E. P. 316
Martínez, J. 1499
Martínez, M. L. 2575
Martínez, R. 879
Martínez, T. 10058
Martínez-Abaigar, J. 9922
Martínez de Azagra, A. 1807
Martínez Millan, J. 5961
Martínez Millán, J. 8034
Martínez Miranda, O. 3253
Martínez Pastur, G. 6170
Martínez Pulido, C. 4291, 7747
Martínez Ramos, M. 7326
Martínez-Sánchez, J. J. 5364
Martínez Yrízar, A. 293
Martínez-Yrízar, A. 8756
Martini, A. M. Z. 1174
Martiniello, P. 1676
Martinozzi, M. 5436
Martins, D. 8086
Martins, H. F. 9907
Martins-Loução, M. A. 5100, 5367
Martinussen, I. 7355-7356
Martinuzzi, F. 835, 943
Martius, C. 5678
Martus, C. E. 6856
Marty, G. 6226
Marty, R. 2523
Martyn, A. 728
Martynov, A. N. 2643, 5361
Martyushova, L. N. 7980
Marumaya, A. 7054
Maruyama, H. 8045
Maruyama, K. 3783, 4766, 7025, 7894
Maryański, M. 7901, 8798
Marzalina, M. 6877
Masakha, E. J. 3250
Masano 1653, 1687, 1790
Maschwitz, U. 10027
Maselli, F. 8734
Maser, C. 4156-4157
Masetti, C. 26
Mash-Hady, M. M. A. 2394, 2396
Mashkovskiĭ, V. P. 1364
Masih, S. K. 985-986, 6155
Maslan, M. 467
Maslin, B. R. 3369, 3857-3858, 5431
Mason, P. 4364
Mason, P. A. 600, 906
Mason, W. L. 906, 5155, 9469
Massawe, A. 1479
Massicotte, H. B. 5603, 5606
Masson, G. 4663, 9824
Masters, R. E. 4071, 9689
Masuda, M. 3123
Masuda, N. 9263
Masuda, T. 3598-3599
Masuka, A. J. 6904, 9098
Masumori, M. 3130, 4896
Masutani, T. 6973, 9339, 9537
Masuzawa, T. 5922, 6252
Matagne, R. F. 9034
Matai, S. 7170
Matakala, P. W. 6738
Mataki, Y. 9678
Matelson, T. J. 3091, 6276
Mateos, E. 1921
Materna, J. 2878
Mathema, P. 8490
Mather, A. S. 5028
Mather, R. A. 8938
Matheson, A. C. 2201, 2447, 8216
Matheson, W. 1867, 2763
Mathew, G. 2332
Mathew, S. P. 505, 9896
Mathew, T. 629
Mathewes, R. W. 4757
Mathur, A. N. 7
Mathur, N. 6889
Mathur, P. K. 2844
Mathura Rai 5558
Matić, S. 4363, 4725-4726, 4808
Matile, P. 4649
Matin, M. A. 6075-6076
Matlack, G. R. 3098, 4783
Matlala, C. J. S. S. 1867
Matney, T. G. 4393, 9575
Mato, M. C. 2970
Matos, G. C. de 9908-9909
Matos, J. A. 7241
Matschke, G. H. 9228
Matschke, J. 4716, 6511
Matson, P. 1281, 1344
Matsuda, K. 7046
Matsui, E. 3790
Matsui, K. 6508
Matsuki, M. 2363, 4032
Matsukuma, C. K. 2750
Matsumoto, M. 1304, 4959, 5441
Matsumoto, Y. 5537
Matsunaga, S. 8083
Matsuo, A. 3738
Matsushita, K. 9603
Matsuzaki, T. 7035
Matta-Machado, R. P. 10116
Mattay, J. P. 6193
Matteoli, U. 1253
Matteucci, G. 1038, 7194
Matthaeis, P. de 5208
Mattheck, C. 1218, 2968, 5372, 10152
Mattheck, C. G. 7114, 7651
Matthes-Sears, U. 2936, 8699, 10135
Matthews, K. B. 5180
Matthews, R. A. 4083
Matthies, D. 779, 5948-5949
Matthies, F. 9658
Matthysen, E. 5717, 7514
Mattila, A. 8233
Mattis, G. Ya. 9234
Mattise, S. N. 5147
Mattos, E. A. de 5407
Mattos, I. F. A. 2750
Mattson, K. G. 4707
Mattson, L. 8745
Mattson, W. J. 5701
Mattsson, A. 5120
Mattsson, L. 1053, 9650
Matuhasi, T. 6008
Matumoto, A. 8157
Matúšová, R. 8218
Matuszkiewicz, J. M. 1380
Matveev, A. V. 8202
Matyas, C. 1659
Matyssek, R. 336, 2495, 5220, 6191
Matyushkin, V. A. 7757
Matziris, D. I. 8214
Mätzler, C. 1862
Matzner, E. 6332
Mau, F. 6959, 8700
Maua, J. O. 6010, 6120, 6145
Maudoux, J. P. 8940
Mauffette, Y. 923, 3434, 5275, 5749
Maugini, E. 6330
Maura, L. 7833
Maurer, B. A. 4916
Maurer, S. 6191
Maurer, W. 9987
Mausel, P. 4953
Mavrandonis, J. M. 4804
Mawanza, M. 6369
Maxwell, C. 4714
Maxwell, S. 729
May, D. M. 1025, 1815
May, G. 9094
May, J. D. 322
Mayaka, T. B. 4594, 5013
Mayaux, P. 9634
Maycock, P. F. 5922
Maydell, H. J. von 4167
Mayers, J. 2723
Mayeux, H. S. 5227
Mayfield, H. F. 3218
Mayhead, G. J. 2613, 5125
Mayle, F. E. 6532
Maynard, A. A. 4088
Mayne, M. B. 1273
Mayor, X. 2653, 3415
Mayuree Ungsiriphaisan 7567
Mazanec, Z. 5731
Maziah Zakaria 975
Mazomenos, B. E. 8686
Mazzarino, M. J. 177
Mazzinghi, P. 1037-1038
M'Bla Koua 4333
Md. Yusoff Musa 7158
Me, G. 1603
Mead, D. J. 325, 1568-1569, 4957, 9706
Meades, W. J. 249
Means, J. E. 2098
Meave, J. 3960, 6547, 6736

Mebrahtu, T. 1267, 2076-2078, 2211
Mecci, A. 3026, 4718
Medan, D. 4728
Medeiros, A. C. 7527
Medeiros, A. C., Jr. 3837
Medellín, R. A. 6506
Mederake, R. 9618
Medford, J. I. 5499
Medina, C. 3798
Medina, E. 1938, 4537, 4704
Medina, S. M. 8435
Medley, K. E. 194
Medlyn, B. E. 2697
Medved, M. 5024
Medvedeva, V. M. 7757
Meek, P. 9597
Meena, S. L. 4313-4314
Meena Bakshi 98, 103, 3400
Meer, P. J. van der 6570
Mees, R. 375, 2001
Meeson, B. W. 33
Meffe, G. K. 9217
Meggio, F. 6421
Megonigal, J. P. 312
Megraw, R. 5508
Megraw, R. A. 1430
Meguro, S. 1221
Mehar Noor 9955
Meher-Homji, V. M. 7869
Meher Noor 9955
Mehetre, S. S. 186
Mehl, C. B. 1548
Mehne-Jakobs, B. 4536, 5299, 8097
Mehra, K. R. 8135
Mehrotra, M. D. 3163, 8295
Meiden, P. van der 804
Meidinger, D. 257
Meier, D. 823
Meier, K. 5096
Meilleur, A. 1357
Meinzer, F. C. 1932, 2999, 3601, 3614, 5283, 6302
Meir, I. 382
Meiwes, K. J. 892, 6332
Meixner, J. 993
Mejía M., J. M. 1212
Mejnartowicz, L. 5483, 5485, 8207
Mekki, A. M. 3913
Melack, J. M. 1858, 6227
Mel'chanov, V. A. 4937
Meldahl, R. S. 2505
Melder, T. W. 2649
Melekhov, E. I. 783
Melià, N. 1190
Melillo, J. M. 326, 1070, 1834, 2790, 3551, 4503, 8826, 9731
Melin, J. 4177
Mellerowicz, E. J. 3127, 5562, 9786
Mellmann-Brown, S. 6557
Mello, C. M. C. 8574
Mel'nikova, N. V. 5041
Meloni, S. 1063
Melville, L. H. 6613
Melville, M. D. 5354
Melvin, S. M. 1515
Memmott, J. 7445
Men-Olivier, L. le 2579, 8078
Menabeni, D. 5066, 6050
Menakis, J. P. 470
Ménard, J. E. 1460, 4020
Menassieu, P. 2337, 4882, 5700
Menaut, J. C. 2511
Menchi, G. 1253
Mencuccini, M. 5222, 7146
Mendel, O. 5835
Mendel, Z. 2315, 4881, 8330
Mendelsohn, R. 2782, 4104, 9569
Mendes, N. M. 9798
Méndez, J. 2970
Mendoza, G. A. 920
Mendoza, M. A. 6248
Menéndez, J. M. 1483, 1499-1500
Menes, P. A. 9784
Meng, C. H. 5963, 9538
Meng, F. R. 1973, 1979, 5963, 8856, 9538
Meng, W. Y. 5740
Menge, J. A. 9076
Mengel, D. L. 2469
Menguzzato, G. 3429, 7832, 8667, 9587
Menke, J. 3726
Menke, J. W. 4517
Menozzi, P. 2199, 8250
Mensah, R. K. 5738
Mensforth, L. J. 3616
Menthière, N. de 2654
Menu, F. 2349
Menut, C. 6439-6440, 9802
Menwyelet, A. 2670
Menzies, M. 4830
Mercadet, A. 1556
Mercado, A. R., Jr. 4115
Mercado, B. T. 5369
Mercado, C. 4773
Mercado, J. L. 9388
Mercer, G. N. 3330
Mercier, S. 6038
Merckx, R. 8434
Mercurio, R. 158, 10093
Meredith, M. P. 9350
Mereles, F. 1378
Merino, J. 2821, 6474
Meritt, D., Jr. 9205
Merle, P. du 8615
Merlet, D. 4488, 4717
Merlin, M. 4168
Merlo, L. 458
Merlo, M. 159, 4463, 6249, 8447
Merrens, E. J. 277
Merriam, G. 4747, 4916
Merriam, R. A. 913, 9598
Merta, D. 4913
Mertens, D. R. 3200
Merwe, S. W. van der 4973
Merz, G. 9865
Merzeau, D. 4730
Merzlenko, M. D. 1778
Merzlyak, M. N. 2996, 5410
Mesanza, J. M. 1166, 1948, 3671
Mesbah, K. 8078
Mesén, F. 2577
Mesén, J. F. 9985
Meserve, P. L. 7524
Meshitsuka, G. 1239
Meshram, P. B. 640
Mesón, M. L. 8120
Meson, M. L. 9861
Meson Garcia, M. L. 9861
Mesquita, R. de C. G. 9883
Messenger, A. S. 3020
Messerschmidt, D. A. 6795
Messier, C. 3454, 3585, 6278, 7152, 8867, 9667
Messina, M. G. 922, 2787, 4090-4091, 5277
Messner, B. 110, 867, 6885
Meštrović, Š. 4726, 4808
Metcalfe, D. J. 9882
Metche, M. 6461
Méthy, M. 1282
Metzger, S. 6596
Meunier, J. D. 8778
Meurer-Grimes, B. 3048, 8234
Meusburger, A. 4565
Meyer, D. R. 5824, 9206
Meyer, G. E. 8502
Meyer, H. J. 2062
Meyer, J. M. 598, 3137
Meyer, R. W. 495
Meyer, Y. 124
Meyer-Gauen, G. 5416
Meyer-Reichert, R. 1582
Meyers, J. A. 3329
Meyers, N. L. 8869
Meyers, W. L. 5250
Meyrahn, H. 9467
M'Gonigle, M. 1872
Mgoo, J. S. 3261
Mhatre, M. 419
Mhlanga, L. 6369
Miadden, J. L. 2986
Miao, S. L. 3099
Micah, V. 1699
Micales, J. A. 604
Michael, E. D. 3203
Michael, N. 7563-7564
Michaels, K. F. 7417
Míchal, I. 339
Michaud, H. 8244
Michel, F. B. 54
Michele, M. N. di 9444
Michelozzi, M. 435, 1929, 2060, 6301, 9107
Michels, K. 4101
Michelsen, A. 1446
Michiels, H. G. 4769
Michler, C. H. 6605
Michon, V. 3757
Mickle, J. E. 8051
Mickler, R. A. 1964
Micko, M. M. 2896
Micol, T. 9297
Middleton, B. A. 3579
Middleton, E. M. 1046
Midgeley, S. J. 8549
Midgley, G. F. 528
Midgley, J. J. 530, 2832, 5468, 8897
Midon, M. S. 3345
Midya, S. 2574
Miegroet, H. van 1953, 3576-3577, 5246, 7887
Miehe, G. 1371, 3917
Miehe, S. 3917
Mielke, M. L. 2872
Mierzejewski, K. 9191
Mietelski, J. W. 5306
Miettinen, A. T. E. 2868
Mighall, T. M. 8145
Migita, K. 9446
Miglietta, F. 4465, 7031
Mignard, E. 8257
Miguchi, H. 2096
Miguel Rengifo, L. 1327
Migunova, E. S. 7691
Migunova, Ye. S. 8789
Mihail, J. D. 9703
Mihál, I. 7383
Miina, J. 3462, 5182, 9521
Mijnsbrugge, K. vander 6821
Mika, P. G. 128
Mikan, C. J. 9916
Mikhaĭlov, A. S. 7815, 9625
Mikhalev, Yu. A. 4454
Mikhaylenko, N. V. 300
Mikhlina, S. B. 873
Miki-Hirosige, H. 3737, 5046
Mikk, M. 8154
Mikkelsen, J. D. 9091
Mikkelsen, T. N. 3652
Mikkola, K. 3570
Mikola, J. 5063, 7731, 7934
Mikolaevskiĭ, N. Ė. 10018
Milberg, P. 8886
Mildenhall, D. C. 4759
Mile, Y. 2475
Miler, Z. 1983
Milián, C. 1540
Miłkowski, L. 4058
Mill, R. R. 5937
Millar, C. S. 2270
Millar, J. G. 5762, 7500, 8344
Millard, P. 1944, 2857, 3637, 6897, 7959
Millat-E-Mustafa, M. 6717
Mille, G. 9604
Mille, P. 764
Mille-Réault, S. 2519
Miller, A. 2381
Miller, A. E. 7784
Miller, B. D. 4305
Miller, B. J. 36
Miller, B. K. 9496
Miller, D. R. 2871, 3725, 7032, 9199
Miller, E. 6999
Miller, E. K. 342, 1169-1170
Miller, F. 7486
Miller, G. E. 6667
Miller, H. 2043, 2599
Miller, H. G. 2612, 2694, 7956
Miller, I. L. 1761
Miller, J. 1342, 1344, 4830
Miller, J. D. 5353, 5657
Miller, J. H. 1768, 4347, 5363, 6124
Miller, J. M. 9791
Miller, J. R. 7549
Miller, J. S. 493
Miller, J. T. 2659
Miller, K. 4342
Miller, K. C. 941, 3781
Miller, M. C. 8352
Miller, M. F. 3844, 4068
Miller, O. K., Jr. 601
Miller, P. M. 9791
Miller, P. R. 2068, 4553
Miller, R. 1169
Miller, R. B. 2023
Miller, R. E. 7053
Miller, R. F. 6564, 9917
Miller, R. W. 4983
Miller, S. L. 1143, 4013
Miller, T. 4016, 9089-9090, 10021
Miller, W. E. 5701
Millet, B. 3711
Milligan, A. 711
Milliken, W. 524
Mills, G. G. 3423
Mills, L. S. 7521, 7528
Mills, N. J. 680
Milne, D. 8731
Milne, G. R. 237
Milner, K. S. 229, 9361
Milthorpe, P. L. 12, 4376
Milton, B. 8031
Milton, E. J. 6224
Milton, K. 3120
Milton, S. J. 3837
Milyutin, L. I. 4746
Milyutina, I. L. 4711
Minal Mhatre 419
Minami, Y. 8095
Minamihashi, H. 3166
Minamikata, Y. 6126
Minarčic, P. 7302, 9742
Minaya Gallego, M. T. 8377
Mindawati, N. 1613-1614, 1687, 1719
Mindeeva, T. N. 4410
Mindt, G. 5795
Minematsu, T. 8083
Ming, J. Y. 3651
Minhas, P. S. 8387
Minischetti, P. 613
Minjas, A. 6732
Minkara, M. Y. 7765
Minkovsky, G. M. 7906
Minocha, R. 7656
Minocha, S. C. 7656
Minoletti, M. L. 3619
Minore, D. 1005, 2170
Minotta, G. 6260, 8602
Minowa, M. 6171
Minowa, Y. 6992
Minter, W. F. 937
Miranda, A. I. 3540
Miranda, M. 6365, 8568
Miroshnichenko, Yu. A. 7807
Mirza, M. S. 3150
Miś, R. 1009
Misaki, A. 425
Misawa, A. 7126
Miścicki, S. 4049
Mishenkov, N. N. 7980
Mishio, M. 311
Mishiro, A. 9793
Mishra, A. K. 8630
Mishra, C. G. 3498
Mishra, J. K. 1551
Mishra, M. 840, 846-847, 858
Mishra, R. R. 1917
Mishra, S. 6846
Mishra, T. K. 2699, 4334
Mishra, Y. D. 2607
Misra, B. M. 605
Misra, G. 4375
Misra, J. 5316
Misra, K. K. 108, 114, 145, 4110
Misra, R. K. 5010
Misra, R. M. 672, 1485
Misra, S. 2969, 4287, 7357

Missano, H. 1796
Mistry, J. 1385
Mitarini, D. 6188
Mitchel-Olds, T. 5508
Mitchell, A. F. 6160
Mitchell, A. K. 3454, 6258
Mitchell, C. P. 4462
Mitchell, D. T. 8279
Mitchell, J. D. 8131
Mitchell, J. L. 7855, 9547
Mitchell, M. D. 6133
Mitchell, M. J. 1950, 3666, 8775
Mitchell, M. Y. 4425
Mitchell, P. L. 3519
Mitchell, R. J. 166, 1771, 4347
Mitchem, C. 9552
Mitra, K. 6806
Mitra, R. 7143
Mitsuhashi, H. 427
Mitsuhashi, W. 2377, 6650
Mittempergher, L. 2269
Mitton, J. B. 3028, 5167, 6590
Miura, K. 4278
Miwa, M. 7048, 9747
Mixon, J. W. 2780
Miyagi, T. 3911, 8063
Miyanishi, K. 2169, 10137
Miyanoshita, A. 9144
Miyashiro, H. 6953, 8688
Miyata, M. 4816
Miyatake, S. 7364
Miyawaki, A. 1221
Mize, C. W. 3258, 9273
Mizell, R. F., III 8329
Mizoguchi, T. 2233
Mizoue, N. 9339
Mizrahi, Y. 3702
Mizui, N. 3376
Mizunaga, H. 1773, 4352, 9534
Mizuta, K. 9829
Mkosana, F. 6816
Mladenoff, D. J. 1587, 4130, 6568, 7526
Mlinšek, D. 38
Mo, L. H. 6888
Moares, C. 4488
Mobbs, D. C. 8429, 9357
Mobbs, I. D. 2655
Mochoge, B. O. 5874
Moen, J. 7277
Moermans, R. 6959, 8700
Moeur, M. 7673
Moezel, P. G. van der 67, 3138
Moffat, A. 2892, 6710
Moffat, A. J. 2620, 4947-4948
Moffet, C. A. 8791
Moffett, M. 536
Moffett, M. W. 3
Moghaddam, M. 1042
Mohali, S. 2285
Mohamed, A. D. 1137, 4302, 4488
Mohamed, Z. 3345
Mohamed Ahamed, D. 4302, 4488
Mohammad, A. 6926, 6939
Mohammed, G. H. 9784
Mohammed Mohiuddin 401
Mohan, L. 8293
Mohan Jha 681
Mohan Kumar, B. 8654
Mohan Subramanian 1273
Mohan Varghese 1987
Mohanan, C. 7402
Mohankumar, B. 629
Mohd Afendi Hussin 7730
Mohd Jaffar Sharri 7730
Mohd. Osman 9279
Mohd. Rasol, A. M. 8738
Mohd Saleem 141
Mohd Shariff, A. H. 1379
Mohd Shukari Midon 3345
Mohinder Pal 98, 101, 103, 105, 3400
Mohit Gera 8564
Mohiuddin, M. 6418
Möhlenbruch, N. 9467
Mohr, H. 1276, 1285, 3973
Mohren, G. M. J. 4179, 4217
Möhring, K. 9628
Mohsin, R. B. H. 6893
Moilanen, H. 10061
Moir, W. H. 8398
Moiroud, A. 599, 1909, 8081
Moiseev, V. S. 1584
Moisseinen, E. 2483
Mojena, B. 1556
Mok, S. T. 1012
Mokronosov, A. T. 7198
Mokther Ahmed 1663
Mol, P. W. 6795
Molchanov, A. G. 4712, 7155
Molchanova, I. V. 1954
Molchanova, T. G. 7064
Moldan, F. 1950, 5245, 5323
Moldau, H. 3661
Moličová, H. 9765
Molina, G. 950
Molina, R. 3156, 3589, 5602-5603, 6610
Molina B., M. P. 3425
Molina Brand, M. P. 1435
Molina Terren, D. M. 6382
Molinari, J. 3868
Molinas, M. L. 1825
Molinatti, P. 2579
Moll, D. 6515
Møller, J. D. 7745, 9445
Möller, K. 1493, 8335
Möllering, J. 2669
Molloy, B. P. J. 3847, 8082
Molofsky, J. 3100
Moloney, C. L. 3837
Moloney, S. 7117
Molsen, D. V. 3835
Momen, B. 4517
Momin, G. A. 9760-9761
Momoshima, N. 7616
Monacelli, B. 9830
Monache, G. delle 9830
Monahan, J. F. 9194
Monakhov, A. K. 8693
Monchaux, P. 6129
Moncrieff, J. B. 2841
Moncur, M. W. 4734
Monfil C., T. 6184
Mongia, A. D. 5865
Monika Bhatia 706
Monkevich, N. 4431
Monsen, S. B. 5146
Monserud, R. A. 3938
Monson, R. K. 4681
Mont, J. J. C. 193
Montagne, P. 8554
Montagnini, F. 5247
Montagu, M. van 2087, 7377
Montagud, E. 2393
Montague, T. L. 5823, 6691
Montalembert, M. R. de 3354
Montalvo, J. M. 1763
Montanari, C. 5912
Montard, F. X. de 5876, 5888, 7580
Montecchi, A. 8468
Montecchio, L. 2268
Monteiro, A. M. 3756
Monteiro, M. L. 8612
Montero, G. 7775
Montero González, G. 7775, 7800
Montes, R. A. 5287
Monteseirín, F. J. 6442
Monteuuis, O. 125, 2609, 3404, 5075
Montgomery, C. 5820
Montgomery, D. R. 6698
Montgomery, M. E. 645-646, 2318, 2323, 3725, 5733, 7032
Monties, B. 5375
Montomery, M. E. 9192
Montoya, J. M. 8120, 9861
Montoya Oliver, J. M. 9861
Monzani, F. 3247
Moog, M. 4458, 9657
Moon, C. K. 1240
Moon, P. A. 5101
Moon, Y. S. 8346
Mooney, H. A. 1975
Moore, B., III 1834
Moore, G. A. 2949
Moore, J. A. 128, 787
Moore, K. E. 8924
Moore, M. M. 3956
Moore, P. H. R. 2917
Moore, S. 4271
Moore, S. J. 6813
Moore, T. 818
Moore, T. R. 361, 8924, 9510
Moorehead, J. R. 2362
Moorhead, D. J. 1732
Moorthy, P. 2603, 4699, 4713, 6113
Moosmayer, H. U. 1424
Mopper, S. 7447
Moraes, J. A. P. V. de 5407, 6035
Moraes, M. 5898
Moraes, M. L. T. 316
Morales, P. 4529
Moran, D. 9649
Moran, E. F. 4953
Moran, G. F. 2213, 5526, 5564
Moran, V. C. 8640
Morandini, R. 3342, 8486
Morat, P. 2081, 8983
Morawe, B. 8933
Moreau, F. 2216
Moreau, J. C. 5571
Moreira, F. M. S. 9070-9071
Moreira, M. Z. 9594
Morel, M. 7020
Morel, S. 9597
Morelet, M. 1460, 4020
Morell, J. M. 5520, 8857, 9052
Morell, M. 1013
Morell, M. G. 3340
Morella, J. J. 6639
Morelli, I. 5436
Moreno, G. 1824, 1933, 8277
Moreno-Casasola, P. 2575, 6736
Moreno Lópes, A. 7847
Morey, M. 7909
Morgan, P. 470, 2565
Morgante, M. 2194, 3974
Morgun, V. N. 1256
Mori, K. 5700
Mori, S. 4845
Mori, S. R. 8605
Moricca, S. 5340, 5510, 9112
Morikawa, R. T. 2621
Morimoto, K. 7465
Morin, H. 22, 1412
Morini, S. 26
Morioka, N. 4632
Morishita, F. 1151, 4547
Morita, M. 1245
Morita, T. 7116
Moritz, A. 2106
Moritz, T. 3017, 3756, 6488, 8927
Moriyama, T. 9633
Moriyama, Y. 4801, 9792
Morla Juaristi, C. 8991
Morley, P. M. 4241
Morley, T. 9904
Mormiche, A. 3821
Morneau, C. 2688
Morohoshi, N. 5536-5537, 7369
Morozova, R. M. 7757
Morretes, B. L. de 5384
Morris, A. R. 7895
Morris, B. J. 4066
Morris, D. M. 4331, 6127, 6632
Morris, L. A. 7664
Morris, R. L. 8804
Morris, S. J. 1319, 8948, 9884
Morrison, C. L. 332
Morrison, D. A. 7138
Morrison, D. J. 2262-2263
Morrison, I. K. 4142, 4490
Morrison, M. L. 1331, 4901
Morrobel, J. 6088
Morse, F. S. 924
Morshäuser, T. 7573
Morsing, M. 8593
Mortensen, H. B. 3514
Mortensen, L. M. 2874, 2997, 3537, 5229, 9753
Mortier, F. 6954, 9611
Morton, C. M. 392
Morton, T. C. 8958
Moscheni, E. 2561
Moser, M. 7652
Moser, O. 6940
Moss, D. M. 1059, 4034
Moss, M. R. 6753
Moss, R. 688, 4929
Mossa, D. S. 4330, 6925
Mosseler, A. 80, 3124
Mössmer, E. M. 6869, 7552
Mössmer, R. 6749
Mostoller, S. A. 4692, 8813
Motani, Y. 8095
Motavalli, P. P. 5008
Mothe, F. 4588
Mothes, B. 4556
Motta, E. 1467, 5118
Motta, R. 4318, 6555, 9540
Motter, W. K. 8919
Motzkin, G. 3877
Mouël, J. L. le 2081
Mougin, E. 1032, 3516, 6226, 9635
Moulis, C. 8914
Moulton, R. J. 1642
Mound, L. 3038
Moura-Costa, P. H. 91, 6887
Moure, J. S. 619
Mousain, D. 5576
Mousseau, M. 2069, 2800, 4401, 4464
Moutounet, M. 4663, 8089, 9824
Mowat, D. J. 3178
Mowrer, H. T. 8398
Moyer, B. R. 10052
Moyne, C. 7951-7952
Moysset, L. 1277
Mrecha, M. S. 8176
Mridula Negi 8503
Mrlina, G. 2382
Mrotzek, R. 5994
Mroz, G. D. 1181, 4208, 4460, 5172
Msika, B. 5877, 9268
Msonthi, J. D. 200
Muanza, D. N. 7808
Mucunguzi, P. 6657
Mudrick, D. A. 3584
Muehlchen, A. 5601
Mueller, P. W. 4558
Mueller-Dombois, D. 3918, 3989, 7311, 7882
Muetzelfeldt, R. I. 9358
Mugah, J. O. 5981
Mugasha, A. G. 3410-3411, 8236
Mugendi, D. N. 5874
Mughal, A. H. 106
Mughogho, D. E. C. 7452
Mugnai, L. 609
Mugnozza, G. S. 1038, 6701
Muhairwe, C. K. 4385
Muhammed Farooq 6363
Mühlhäusser, G. 9639
Muiña, M. 1496
Muir, P. D. 9226
Mukai, Y. 8225
Mukerji, A. K. 47
Mukerji, K. G. 5605
Mukesh Joshi 535, 6294
Mukherjee, A. B. 3672
Mukherjee, B. B. 2598
Mukherji, S. D. 3496
Mukhtar, A. S. 1324, 2143
Mukhtarova, É. Sh. 9812
Mulder, W. 1907
Muleo, R. 26
Mulham, W. E. 12
Mulinix, C. A. 5090
Mullen, R. T. 6471, 8113
Müller, A. 2813, 9764
Müller, B. 7282
Muller, C. 4151
Müller, C. H. 3851
Müller, D. 8675
Muller, D. J. 240
Müller, F. 9328, 9640
Müller, M. 4727, 4836, 6584
Müller, M. M. 2259
Müller, W. 9501
Müller, W. J. 5665
Muller, Y. 4909

Müller-Starck, G. 6583, 7343
Mullin, L. J. 1425
Mullin, T. J. 6589, 9042
Mullins, B. J. 7138
Mulongoy, K. 8265
Mulsow, H. 7540
Mumma, R. O. 5499
Mumme, R. L. 4190, 4733
Mummery, D. C. 6190
Munasinghe, M. 8544
Münch, D. 1982, 9303
Munch, J. C. 8784
Mundanthra Balakrishnan 7626
Munger, J. W. 3328, 8924
Mungkorndin, S. 3243
Munir, A. A. 8129
Muniyappa, T. V. 8642
Munn, I. A. 2777
Munoz, E. 6509
Muñoz, F. J. 6442
Muñoz, O. M. 4744
Muñoz-Mingarro, D. 1897
Muñoz V., M. 6086
Munro, R. C. 906, 3611
Munshi, I. 7698
Munson, A. D. 6324
Munthali, S. M. 7452
Munthe, J. 8851, 8853
Munyanziza, E. 9075, 9479
Münzenberger, B. 6623
Muoghalu, J. I. 3578, 7878
Murado, D. M. 5760
Murai, M. 8225
Murali, K. S. 2102
Murali, P. M. 2605
Muramoto, M. 3166
Muraoka, O. 8083
Murashige, T. 9036
Muratova, E. N. 4746, 8194
Murawski, D. A. 3034, 5425
Mureithi, J. G. 3257, 5060
Murless, P. 6951
Murniati 1711
Murphy, J. B. 2088
Murphy, J. O. 2485, 10160
Murphy, P. A. 2712, 3480, 5178, 6099
Murphy, T. M. 7093
Murray, B. 516
Murray, B. C. 2515, 2728
Murray, D. M. 9601
Murray, F. 3663
Murray, M. B. 2008
Murray, N. L. 4073
Murrell, J. C. 5526
Murthy, A. B. 6356
Murty, D. 2697
Murugan, C. 6305
Murugesan, S. 9149
Muruleedhara, B. N. 4012
Musaev, E. K. 4548
Musálem, M. A. 219
Muse, H. D. 910
Mushinsky, H. R. 4907
Mushove, P. T. 7121
Musoko, M. 5612
Mussong, M. 8601
Mustart, P. 4973
Mustart, P. J. 531, 1305
Mustonen, S. 3455
Mutanal, S. M. 10114
Mutasa, S. L. 9565
Muthanna, M. B. 5600, 6617
Muthuchelian, K. 1261, 6305
Muthukumar, T. 3152
Muto, N. 4010
Mutsch, F. 335
Mutto Accordi, E. M. 8839
Mutz, R. 31
Muys, B. 8999
Muzika, R. M. 452
Muzinga, K. 2671
Mvukiyumwami, J. 6952
Mwabumba, L. 1786, 2555
Mwasumbi, L. B. 1369, 5166
Mwendwa, A. K. 6371
Myalkenen, E. 9858
Myers, D. E. 1840
Myers, G. 8901
Myers, R. K. 937
Myhre, R. J. 6239
Myhrman, D. 5158
Mykkänen, R. 7829
Myklestad, Å. 2136-2137
Myllynen, A. L. 6810
Myllyvirta, T. 3570
Myre, R. 4666, 5291
Myren, D. T. 7633
Myrold, D. 2814
Myrold, D. D. 327, 2231
Myster, R. W. 3102, 9767
Mziray, W. 3045
Na, C. S. 8238
Nabil, M. 6469
Nabli, M. A. 5381
Nabulsi, Y. A. 1534
Nachiappan, K. M. 2095
Nadagoudar, B. S. 10114
Nadeau, P. 278
Nadelhoffer, K. J. 321, 9731
Nadiar, S. 1553
Nadkarni, N. M. 1389, 3091, 3732, 6276
Næsset, E. 5021, 5170, 5205, 9629
Nag, A. 7170
Nagahama, S. 7341
Nagahashi, M. 2680
Nagai, S. 2029, 6445
Nagamitsu, T. 8951
Nagarajaiah, C. 107, 1804
Nagarajan, B. 1683, 3140
Nagarajan, G. 8267
Nagaraju, N. 6151
Nagashima, I. 4201
Nagata, S. 9612
Nagaveni, H. C. 2099
Nagayama, M. 7025
Nagayama, Y. 3413
Nagel, H. D. 8846
Nagel, J. 9595
Nagele, M. 1886
Nageleisen, L. M. 1297, 3812, 3817
Nagumo, H. 6195, 9931
Nahar, T. N. 8677
Nahrstedt, A. 9818
Naidoo, G. 2839
Naidu, C. V. 133, 2541, 6379, 6485, 6896, 8821
Naik, K. S. 9115
Naiman, R. J. 1572, 3214, 3870
Nain, W. 6249
Nair, C. T. S. 6805
Nair, P. K. R. 4114, 5938, 9511
Nair, S. 2242, 6880
Naithani, H. B. 733, 3050, 7219
Naithani, S. C. 3009
Najar, M. 9053
Najt, J. 7419
Nakabayashi, T. 6953, 8688
Nakagoshi, N. 7292, 9005, 9714
Nakahara, S. 9129
Nakai, I. 661
Nakamura, F. 6290, 6910
Nakamura, K. 5755
Nakamura, N. 4386
Nakamura, S. 3737, 4701, 5046, 9336
Nakamura, T. 2202
Nakane, K. 7047
Nakao, H. 5123, 5839
Nakashima, T. 4040
Nakashizuka, T. 3226, 6221, 7211, 8403
Nakata, G. 9446
Nakata, M. 4475, 7035, 7279, 9925
Nakatani, N. 5390
Nalawadi, U. G. 1690
Naldini, B. 609
Nalon, M. A. 2750
Namai, H. W. 2410
Namba, T. 6953
Nambiar, E. K. S. 7752, 7826, 7884
Nameth, S. T. 3988
Namibia, Ministry of Agriculture, Water and Rural Development, Directorate of Forestry 5038
Namkoong, G. 3132
Nanami, N. 4386
Nanba, M. 6008
Nance, W. L. 2274, 5494, 8229
Nandal, D. P. S. 7319
Nandi, A. 2699
Nandika, D. 2480
Nandwani, D. 5070, 6889
Nanson, A. 9030
Napoléone, M. 5869
Nápoles, S. 1557
Narain, P. 522
Naranjo Borges, J. 8888
Narayan, D. 2876
Narayana Bhat, M. 1442
Narayanaswamy, M. N. 1672
Nariboli, P. 9172
Narioka, H. 8435
Narita, I. 2252
Narita, K. 5463
Narod, F. 6440
Narushima, N. 7883
Narwal, S. S. 7319, 7644
Nascimento, E. C. do 5713
Nascimento, V. A. 6643
Nascimento Filho, F. J. do 587
Nash, B. L. 36
Nash, C. H. 8699
Nash, D. R. 7460
Nash, R. J. 3835
Nashikkar, V. J. 6905
Näsholm, T. 24, 2493, 2611, 4528, 7646, 9726
Nasi, R. 2013, 9252
Nasi, R. P. 6434
Nasir, M. K. A. 7172, 8907
Naskali, A. 2483
Nason, G. E. 327
Nasroun, T. H. 85
Nasrullah, N. 7126
Nastis, A. S. 9286
Nasuno, Y. 8653
Natale, F. de 364
Nataraj, K. N. 2281
Natarajan, K. 4850, 8267
Nath, S. C. 8959
Nation, J. L. 674
Nätt, M. H. 5161
Naughton, G. G. 4344
Naumann, A. 7067
Naumann, K. 7479
Naumova, L. A. 1962
Naus, J. 467
Nauta, A. P. 55
Nautiyal, A. R. 83, 9433
Nautiyal, J. C. 9651-9652
Nautiyal, S. 100, 151, 3050
Návar, J. 2398
Navrud, S. 2483
Naya, K. 1018
Nayar, T. S. 3293
Nayital, R. K. 848
Naylor, B. J. 4906
Nazarov, A. N. 5308
Nazarov, I. M. 5332
Nazif, M. 1755
Nazimova, D. I. 3938
Ndiaye, P. 4939
Ndiaye, S. 5093
Ndoye, I. 9725
Ndungu, J. N. 3136, 3993
Neal, C. 3670, 5249, 5830, 7548, 8419
Neal, J. E. 2919
Neal, M. 3670
Neale, D. 5508
Neale, D. B. 3981, 5475, 5481, 8208, 9114
Nealis, V. G. 5715, 7503
Neall, V. E. 3886
Neary, A. J. 1991
Neary, D. G. 2471, 4920, 5469, 9213
Neave, I. A. 3059, 7272
Nebe, W. 2850
Nebeker, T. E. 7205-7206
Nebout, J. P. 4159
Necibi, S. 9164
Nedunchezhian, N. 6305
Nee, M. 4739
Needham, D. 4372
Needham, T. 4353
Neelam Bhatnagar 2556
Neelu Gera 8564
Ne'eman, G. 382, 3709, 9777
Ne'eman, R. 382
Neerja Hajela 1456
Neet-Sarqueda, C. 5489
Neeta Karki 9290
Nef, L. 8328
Negi, A. K. 81
Negi, D. V. 3192
Negi, M. 8503
Negi, M. S. 3586
Negi, R. C. S. 78
Negi, S. S. 4154-4155
Negreiros, G. H. 4085
Negreros-Castillo, P. 2648
Negrier, P. 1698
Negrón, J. F. 7438
Negură, A. 8524
Negussie, G. 9469
Nei, M. 5514
Neil, J. C. 7645
Neill, C. 8826
Neill, D. 2782
Neilsen, W. A. 8711
Neilson, R. P. 7682, 7870
Neimanis, S. 2084
Neinhuis, C. 5333
Neirynck, J. 6941, 8999
Neish, P. G. 8055
Nekrasova, A. A. 9756
Nel, E. M. 1865, 3291
Neldner, V. J. 7014
Nellis, M. D. 5442
Nelson, B. W. 3566
Nelson, C. D. 5494, 8229
Nelson, D. J. 3707
Nelson, E. C. 3853
Nelson, E. E. 4299
Nelson, J. L. 4066
Nelson, L. E. 8823, 9464
Nelson, N. 8729
Nelson, P. E. 2336
Nelson, R. 3524
Nelson, R. A. 6004
Nelson, R. M., Jr. 366
Nemani, R. 4084
Nemani, R. R. 7011
Nembi, V. 4021
Nepal, S. K. 1645, 4220, 8442, 8446
Nepstad, D. C. 4085
Nepveu, G. 4153, 4586, 4588, 4595
Nerd, A. 3702
Nerg, A. 5397
Neris, L. E. 1335
Nesbitt, K. A. 8245
Nesmith, C. 6737
Nester, M. R. 5052, 5129, 7553
Neto, E. T. 2147
Neto, G. G. 8995
Neufeld, H. 3667
Neufeld, H. S. 2867, 9744
Neuhäusl, R. 3919
Neuhäuslová, Z. 3919, 4776
Neuman, D. S. 8804
Neumann, F. G. 2554, 4031, 6376, 6664, 7423
Neumann, H. H. 6262
Neumann, J. C. 5272
Neumann, M. 4434, 4854
Neumann, P. 5012
Neumann, U. 3780
Neuner, G. 8761
Neuvonen, S. 2226, 3647, 8304, 9117
Neuvy, O. 7295
Nevidomov, A. M. 4780
Nevill, R. J. 7399, 9125
Neville, H. A. 8091
Neville, P. 9436
Newberry, J. D. 787, 2627
Newcombe, G. 4871, 5659, 8308
Newcomer, J. A. 33
Newell, E. 548
Newell, S. Y. 9066
Newman, D. J. 7808
Newman, J. 5302
Newman, S. E. 5113

Newnham, R. M. 2498, 4408
Newsham, K. K. 4572
Newstrom, L. E. 2928
Newton, A. C. 3611, 5528
Newton, I. 1526
Newton, L. 4915, 4919
Newton, M. 2650-2651, 4486, 5143, 9794
Newton, P. F. 1008, 2500, 4399
Newton, R. J. 1688, 6782
Neyland, M. G. 3055
Neyra, M. 7389
Neys, O. 1704
Nezry, E. 3516
Ng, F. S. P. 777, 1203
Ng, P. K. L. 10080
Ngando Mpondo, T. 9808
Ngugi, D. N. 3256
Ngulube, M. 1670, 1786
Ngulube, M. R. 1670, 1786, 2555
Nguyen, A. 6429
Nguyen, P. V. 3416, 9276
Nguyen Hoang Anh 8085
Nguyen Luyen 6709
Niccol, R. J. 5073
Niccolucci, M. J. 4455, 6244
Nicholas, J. R. J. 7880
Nicholas, N. S. 5915
Nicholls, A. O. 3329
Nichols, K. L. 4522
Nichols, T. J. 8645
Nichols-Orians, C. M. 5524
Nicholson, C. F. 8416
Nicholson, M. S. 205
Nickerson, N. H. 1754
Nicodemus, A. 3991
Nicol, H. I. 4376
Nicolai, V. 2004, 2356, 9171
Nicolao, L. 458
Nicolaou, N. 3076
Nicolescu, L. 8604
Nicolescu, N. V. 7596
Nicolini, E. 6387
Nicolle, D. 8130
Nicolson, S. W. 5164
Nicolussi, K. 6764
Niejenhuis, A. van 3980
Nielsen, K. K. 9091
Nielsen, T. 3575
Nielsen, U. B. 567
Nielson, F. 9282
Niemalä, P. 1461
Niemann, H. 2631
Niemelä, P. 2994, 10069
Niemeyer, H. 10079
Niemi, G. J. 4924
Niemiera, A. X. 6073
Nieminen, M. 6068
Nieminen, S. 8843
Nieminen, T. M. 4466
Niemistö, P. 9531-9532
Nienstaedt, H. 566
Nieppola, J. 6969, 9590
Nieto de Pascual-Pola, C. 6955
Nieuwenhuizen, W. 6693
Nigam, S. K. 4375
Nigh, G. D. 5177
Nigh, R. 9287
Nihlgård, B. 3674, 8594
Niinemets, Ü. 4660, 7030
Niitsu, T. 2108
Niiyama, K. 7307
Nik Muhamad Majid 3241, 5895
Nikiforchin, I. V. 1584
Nikinmaa, E. 1955, 5284, 7146, 8058
Nikkanen, T. 3976, 5063, 8210
Niklas, K. J. 408, 512, 2934, 6409, 8044
Niklińska, M. 7901, 8798
Nikolaidis, N. P. 2871
Nikolopoulos, D. 7027
Nikolov, N. T. 3333
Nikonov, V. V. 1920, 4568, 7091, 7094
Niles, L. J. 4922
Nilsen, P. 7945
Nilson, T. 1866
Nilssen, A. C. 2350
Nilsson, Å. 1095
Nilsson, C. 3132, 4838
Nilsson, J. E. 6588
Nilsson, L. O. 4538, 6802, 7966, 8047, 8260
Nilsson, M. 7008
Nilsson, M. C. 1759, 5464, 7260, 9913
Nilsson, R. 3759
Nilsson, S. 2520, 8013
Nilsson, S. G. 1521
Nilsson, U. 3457, 3460, 9529, 9681
Nimis, P. L. 1353
Nin, S. 5062
Ning, S. G. 4767
Ninić-Todorović, J. 2109
Ninomiya, I. 4325
Nipoti, P. 10006
Nirmal Singh 9249
Nirmalnath, J. P. 4851
Nirmalnath, P. J. 4011
Nisbet, R. A. 3481
Nisbet, T. R. 8868
Nishi Mathur 6889
Nishida, H. 4646
Nishida, M. 4646, 5441
Nishida, T. 5401
Nishikawa, K. 9572
Nishimura, K. 560, 6592, 7341, 7344
Nishimura, S. Y. 8073
Nishioka, I. 6462, 8690
Nishizawa, T. 3900, 7632
Niska, K. 7879
Nitami, T. 6274
Nitare, L. 8289
Nitaya Kantisophon 7567
Nitis, I. M. 8567
Nitta, H. 5046
Nitto, G. A. de 2303
Niu, C. H. 7190
Niven, B. S. 3326
Nixon, K. C. 3851
Njebele, C. W. 1796
Njiti, C. F. 4952
Nkang, A. 9435
Nkongolo, K. K. 2189, 8224
Nkunya, M. H. H. 5166
Noamese, B. K. 8691
Noble, A. D. 154
Noble, I. R. 7139, 7866
Noble, M. G. 3638
Noble, R. E. 1765
Nobre, A. D. 4953
Nobuchi, T. 8092
Nocentini, S. 3430, 4378, 6181, 6201, 7659, 7832, 9571, 9608
Noda, I. 798
Nodvin, S. C. 2470
Noe, F. P. 2427
Noga, G. 7969
Nogler, P. 3292
Noguchi, T. 2578
Nogueira, J. M. 3352
Noh, D. G. 8657
Noh, E. R. 8326
Noh, E. W. 8239
Nohara, T. 441
Nohrstedt, H. Ö. 1095, 9458
Noin, M. 5092
Nola, P. 3288
Nolet, B. A. 2386
Nome, S. F. 1466
Nômmik, H. 2490, 6284
Nonaka, G. 6462
Nonaka, G. I. 8690
Nonoda, T. 4600
Noor, M. 9955
Noor Aini, A. B. 9456
Noordwijk, M. van 7666, 10102
Noort, S. van 620
Nor Aini, A. S. 5050, 6603, 6867, 9420
Norberg, P. 3759
Norby, R. J. 5406, 6423, 6475
Nord, B. 9235
Nord, J. 4045
Nordell, K. O. 6482
Nordén, L. G. 2611
Nordén, U. 2816, 2820
Nordenhem, H. 2347
Nordheim, E. V. 27, 589
Nordin, V. J. 4248
Nordlander, G. 2347
Nordmeyer, A. H. 4174
Norell, L. 1422, 3132, 3972
Norén, A. 8007
Nørgaard, J. V. 7745, 9445
Norgren, O. 3745
Norin, T. 5392
Normah, M. N. 5102
Normand, L. 5584, 8284
Normandin, D. 1544
Nørnberg, P. 3078, 8016
Norokorpi, Y. 338, 1165, 4396-4397, 5314
Noronha, C. 5100
Norris, D. 5242
Norris, D. A. 360, 7127
Norstog, K. J. 3835
Nortcliff, S. 8679
North America, Flora of North America Editorial Committee 5928-5929
Northup, R. R. 9690, 9705
Norton, D. A. 271, 3426, 4878, 7413
Norton, J. D. 592, 2217
Norton, S. A. 3320, 3574
Norton, T. W. 1525
Norvell, L. L. 4870
Nose, M. 8101
Nosenzo, A. 4440, 6175
Noshiro, S. 4625
Noske, R. A. 1315
Noss, R. F. 7631
Noti, M. I. 5037
Notske, D. 8456
Nott, R. 9187
Nouaim, R. 3146-3147
Nougarède, A. 7733
Nougarède, O. 5887
Nouri, P. A. 8003
Nouvellet, Y. 6095, 7768
Novák, L. 5926
Novoselova, G. N. 1962
Nowacki, G. J. 3054
Nowak, C. A. 6029
Nowak, D. J. 1588, 4134
Noyé, G. 7789
Nozaki, A. 8095
Nozaki, T. 9793
Nozmul Haque 2458
Nshubemuki, L. 8236
Nsolomo, V. R. 5628, 8176
N'Soukpoé-Kossi, C. N. 1156, 3779
Ntayombya, P. 9275
Nuberg, I. K. 3270
Nullet, D. 9669
Numata, M. 7932
Núñez, C. A. 6872-6873
Nuñez, G. 177
Núñez, M. P. 4744
Núñez-Olivera, E. 9922
Núñez Regueira, L. 9773
Nunzi, L. 207
Nuorteva, P. 3672, 8843
Nur Supardi, M. N. 976
Nurse, M. 9289
Nurse, M. C. 6742, 9289, 9293
Nuryanto, K. 7770
Nussbaum, R. 4087, 8771
Nützel, R. 4387
Nuutila, A. M. 875
Nwambie, A. I. 201
Nwoboshi, L. C. 5131, 5174
Nybro, C. 1069
Nyemba, A. M. 9808
Nyerges, A. E. 3265
Nygren, K. 7845
Nygren, M. 438, 9427
Nygren, P. 1955, 5411, 9733, 9991
Nykänen, H. 7783
Nykvist, N. 1748
Nyland, R. D. 162, 1781
Nylin, S. 648
Nylund, J. E. 2072, 2246, 3159
Nyman, B. 1152
Nyoka, B. I. 557, 9098
Nyong'o, R. N. 5420
Nyquist, H. 10071
Nys, C. 1994, 3820, 8779
Nystrom, C. W. 8354
Nyström, U. 5245
Nze-Ekekang, L. 9799
N'Zore, K. 8519
Oates, J. F. 7602
Oballa, P. O. 9051
Obasi, N. B. B. 436
Öberg-Asplund, G. 8777
Obermeier, E. 7282
Oberwinkler, F. 3143, 3158, 6623
Obi-Osang, T. E. 3724
Obiazi, C. C. 9269
Obiri, J. A. F. 1479
Obón, C. 7809
O'Brien, E. M. 2150
O'Brien, S. P. 2033
O'Callaghan, D. 7609
Ocampo, E. N. 1210
Ocaña-Vidal, J. 1012
Ocegueda Cruz, S. 7278
Ochi, S. 6944
Ochiai, Y. 4485, 6926, 7364-7365, 8590
Ochieng', G. O. 4239
Ockenfels, R. A. 3202
O'Connell, A. F., Jr. 7539
O'Connor, J. P. 5682
O'Connor, M. B. 4958
Oda, K. 4582, 9795
Oddiraju, V. G. 4978
O'Dea, M. E. 5452
Odegi-Awuondo, C. 2410
Odén, P. C. 3777, 9846
Odera, J. 6000-6001
Odera, J. A. 5981, 6000-6001
Oderwald, R. G. 3452, 5016, 5197, 6217
Odin, H. 3428
Odintsov, D. I. 9771
Odnol'ko, A. A. 9736
Odo, P. E. 1946
O'Donnell, D. J. 8636
O'Donnell, M. E. 2111
O'Dowd, D. J. 621-622, 3172
Odum, H. T. 2517, 4236, 5973
Oehrle, S. A. 9330
Oelmüller, R. 3973
Oelze, K. A. 7811
Oesten, G. 2757, 8744
Oester, B. 4438
Ofeimu, M. O. 7758
Ofeimu, O. 7758
Offerman, H. L. 4955
Ofman, D. J. 8082
Ofong, A. U. 8313
Ofori, J. 4993
Ogawa, H. 6267
Ogawa, K. 1271
Ogawa, T. 9868
Ogbonnaya, C. I. 127, 134-135
Ogden, J. 4470
Ogen-Odoi, A. A. 5362
Ogimi, C. 2287
Ogino, K. 4325
Ogle, B. 1796
Ogner, G. 6348
Ögren, E. 451, 464
Ogura, T. 8653
Oh, C. H. 8077
Oh, J. S. 8709
Oh, K. I. 6613
O'Hara, K. L. 3490, 4792, 6139
Ohara, S. 1241, 5389, 7174
O'Hara, T. J. 210
Ohashi, H. 426
Ohba, K. 565, 2202, 5497, 8213, 9037
Ohira, M. 6445
Ohira, T. 544, 1237, 1247, 4670, 5389, 6445
Ohkawabata, O. 2720, 9606
Ohki, F. 9820
Ohkubo, K. 5391
Ohlson, M. 7259, 9934
Ohlsson, H. 9726
Ohmann, J. L. 4902
Ohmann, L. F. 4781

Ohnemus, K. 2687
Ohnishi, K. 8045
Ohrner, G. 6003
Ohrui, K. 1533, 4599
Ohsaki, K. 1624
Ohsawa, M. 2260, 4857-4858, 7932, 9014
Ohsawa, T. 5441
Ohta, S. 560, 4591, 6592, 9758
Ohtani, J. 400, 2029, 4656, 6411-6412, 8891
Ohtani, Y. 1117, 1189
Ohte, N. 1898
Ohtonen, A. 6295
Ohtonen, R. 6295
Ohtsu, S. 8889
Ohtsubo, Y. 7369
Ohya, E. 2340, 4040
Ohyama, M. 9832, 9841
Oikawa, R. 4369
Ojala, J. 6094
Ojeda, F. 7298
Ojha, J. K. 7810
Ojima, D. S. 1071, 3625, 4953
Okabe, H. 9999
Okada, N. 8092
Okada, S. 9879
Okamoto, H. 2339
Okamoto, M. 8981
Okamura, M. 4286
Okano, S. 7932
Okano, T. 9793
Okarma, H. 4058
Okazaki, M. 7999
O'Keefe, P. 5925
Okeke, A. I. 2818
Okere, A. N. 8801
Oki, T. 3738
Okinaka, T. 8850
Okitsu, S. 8985, 9001
Økland, B. 7418
Økland, R. H. 3941
Okogu, B. E. 3686
Okolie, N. P. 436
Okolo, A. 7176
Oksanen, J. 348, 4035, 8107
Oksanen, L. 7263, 7277
O'kting'ati, A. 3261
O'Kting'ati, A. 3261, 6732
Oku, T. 3008
Okuda, S. 4485
Okuda, T. 8183
Okuda, Y. 2664
Okudaira, T. 4874
Okuizumi, H. 2203
Okuma, M. 4386
Okuyama, T. 1177, 4585, 4590, 4643, 6359
Olano, J. M. 3908
Olapade, E. 10101
O'Laughlin, J. 4930, 8541
Olavarria U., J. 2525
Olbrich, B. 2832
Olbrich, B. W. 3612
Oldeman, R. A. A. 3364, 9479
Oldemeyer, J. L. 5809
Oldroyd, B. P. 8356
Oleghe, P. E. 1946
Oleksyn, J. 831, 2492, 6030, 7612, 9752
Olesen, T. 3536
Olioso, A. 1282
Oliva, E. 220
Oliva, L. 177
Oliva, M. 1825
Olivares, E. 2990
Oliveira, A. B. de 9838
Oliveira, A. C. 6804, 8612
Oliveira, C. A. L. de 9907
Oliveira, G. 5367
Oliveira, G. G. de 9838
Oliveira, L. C. de 6180
Oliveira, M. de L. A. A. de 7245
Oliveira, R. R. de 9907
Oliveira, V. L. de 5611
Oliveira, W. J. 3566
Oliveira-Filho, A. T. 1367
Oliver, W. W. 3145, 4357, 8605
Oliveria, F. L. 4037
Olivier, J. M. 5575, 5613
Olkkonen, H. 7996
Øllgaard, B. 3071
Ollivier, E. 9799
Olmsted, I. 1081, 6561, 7327
Olng'otie, P. A. S. 9051
Olofsson, E. 9173
Olomola, A. S. 7700
O'Loughlin, C. 5834, 6367
O'Loughlin, C. L. 2910
O'Loughlin, E. 7551
O'Loughlin, E. M. 15
Olovyannikova, I. N. 4962, 8382
Olowokudejo, J. D. 394, 3724
Olsen, J. E. 3017, 6488, 8927
Olson, D. M. 21
Olson, J. R. 2627
Olsson, B. A. 3569
Olsson, H. 4443, 6229, 7006
Olsson, M. 3759
Olsson, M. T. 7890
Olsthoorn, A. F. M. 4296
Olykan, S. T. 7664
Om Prakash 9417
Omaliko, C. P. E. 2818
O'Malley, D. M. 8222, 8226, 8228
Omari, M. A. 7767
Ombir Singh 3388
Omi, S. K. 907
Omkar Singh 3586, 5190, 8503
Omori, S. 3744
Omule, S. A. Y. 2684, 4358
Onda, Y. 9762
O'Neill, E. G. 1963, 6798
O'Neill, G. J. 3692
O'Neill, J. J. M. 8279
O'Neill, R. V. 4955, 8736
O'Neill, T. 1867
Ong, B. L. 6467, 6551
Ong, J. E. 6427
Onishi, I. 9915
Onnis, A. 8793
Ono, A. 6008
Ono, E. O. 4283
Ono, S. 10132
Ono, T. 3004
Onodera, H. 2954, 4631
Onthank, K. 2782
Onwona-Agyeman, S. 4632
Onwukaeme, N. D. 8689
Onyeanuforo, C. C. 8801
Onyunas, V. 8796
Oohata, S. 7867, 8132
Oommachan, M. 6155
Oosten, J. J. van 459, 1879, 2082
Oosterbaan, A. 320
Ooy, D. J. van 7102
Opdam, A. 3590
Opheim, T. 2482
Opp, C. 305
Oppen, M. von 4101
Oppmann, B. 2878
Opydo, J. 7095
Ord, B. G. 5274
Ordóñez, N. 7713
Oren, R. 1029, 1127
Oria, J. A. 8438
Orians, G. H. 1572
Orihara, Y. 2578, 2580-2581
Orihuela, B. 518
Orland, B. 1016
Örlander, G. 4041, 9333, 9681
Orlov, A. N. 2661
Orlovskiĭ, S. N. 4609
Ormerod, S. J. 8864
Orok, E. J. 8325
Orondo, S. B. O. 7440
Orozco-Segovia, A. 3549
Orquin, L. E. 1210
Orr, B. 7830
Orr, B. D. 4460
Orsini Velásquez, G. 9902
Ørskov, E. R. 437
Ortega, R. 1557
Ortega Escalona, F. 1211, 4629-4630
Ortega Muela, C. 7800
Ortiz, A. 8686
Orts, S. 2258
Orwig, D. A. 2408, 5914, 6562, 6763
Oryem-Orga, H. 7798
Osakabe, K. 5536-5537
Osakabe, Y. 7369
Osawa, A. 1231, 1487
Osborn, J. M. 5378
Osborne, C. 1877
Osborne, L. L. 4076
Osborne, R. 3703
Osei, W. Y. 3362
Oshima, Y. 8157
Oskolski, A. A. 8068
Osler, G. H. R. 8650
Osman, M. 9279
Osmond, C. B. 1287
Osório, J. 1930
Osorio, L. F. 7348
Ostaff, D. P. 5694
Osterbauer, N. K. 3170
Ostfeld, R. S. 5811
Östin, A. 7184
Östlund, L. 5916
Østreng, G. 9878
Ostrolucká, M. G. 423, 1310, 5080, 7212
Ostrom, E. 4463
Ostry, M. E. 3999, 8308, 10011
Osunkoya, O. O. 2798, 4050
Oswald, E. T. 256, 4580
Oswald, H. 8615
Oswin, S. D. 4675
Oszlányi, J. 9741
Otegui, M. S. 2024
Otero D., L. 6184
Otruba, I. 2439
Otsamo, A. 6010, 6094, 6145, 6371, 7560, 7781
Otsamo, R. 6371
Otsamo, R. L. 6371, 6574
Otsuka, H. 5261
Otsuka, M. 2475
Ott, E. 3912, 6555
Ott, M. 9993
Ottenheim, M. M. 2386
Ottenschlaeger, M. L. 3463
Otter, T. 4679, 5299
Ottman, K. 4983
Ottmar, R. D. 9507
Otto, H. J. 9617, 9953
Ottorini, J. M. 6186
Ottosson, B. 3315
Ottosson-Löfvenius, M. 3428, 3559
Ou, B. R. 978
Ou, K. 6490
Ou, M. 5931
Ouanouki, B. 900, 5116
Ouedraogo, D. B. 8520
Ouedraogo, G. 10117
Ouedraogo, S. J. 6061
Ouellet, D. 215
Ouellette, G. B. 7160
Ouimet, R. 7972
Oura, H. 8690
Outcalt, K. W. 5053, 7135
Outer, R. D. 8071
Ovalle, A. R. C. 1092
Ovalle, C. 5878
Ovalle M., C. 5878
Ovchinnikov, F. M. 9772
Oven, P. 1214, 4626
Overdieck, D. 1882
Overton, J. M. 2294
Ow, C. F. Y. 8731
Owen, J. A. 5741
Owen, J. T. 8457
Owen, J. V. 8241
Owen-Smith, N. 5808
Owens, J. G. 2870, 8852
Owens, J. N. 780, 1319, 5005, 8948, 9327, 9429, 9884
Owens, M. K. 1263, 7323
Owoundi, R. E. 4588, 4595
Oyarzun, C. E. 5843
Ozaki, K. 4894, 5689
Ozawa, S. 428, 1238, 1240, 3744
Özek, T. 9804
Ozinga, W. A. 2245
Ozrina, R. D. 4294
Pääkkönen, E. 1129, 2880, 6336, 7096
Paal, J. 3944
Paap, P. 8471
Paasivirta, J. 6455, 7989-7990
Paavilainen, E. 8469
Pablo, C. L. de 3871, 8407
Pacala, S. W. 4206, 5181, 5472, 7328
Pacheco, L. F. 5898
Paci, M. 1772
Pacini, E. 3375, 3838
Paciorek, C. J. 10052
Packham, D. 373
Packham, J. R. 10149
Pacyniak, C. 1322, 2114
Padaganur, G. M. 9115
Padhye, M. D. 202
Padilla, J. E. 1358
Padmaiah, M. 713
Padmanabhan, D. 8347
Padovan, F. 10006
Padro, J. 1168
Padutov, V. E. 571, 5514, 9044
Páez, S. 2148
Päffgen, H. P. 9467
Page, C. N. 6758
Page, J. C. 939
Pagel, H. U. 6674
Pagès, L. 2962
Pai, B. 6608
Pai, R. C. 5531
Paim, N. R. 8074
Pain, O. 6129
Paine, A. 8691
Paine, T. D. 656, 5758, 5762, 7475, 7500, 8338, 8344
Painter, R. A. 4813
Painuli, R. M. 198
Pair, J. C. 68, 4985, 8939
Pais, M. S. 6892
Paivanen, J. 8469
Päivärinta, J. 4541
Päivinen, R. 1850, 9584
Pajari, B. 7040, 7935
Pakdee, P. 7175
Pakkanen, A. 8233
Pakonen, T. 966, 6494
Pal, M. 98, 101, 103, 105, 3400
Pal, S. 3272
Palacios, R. A. 2051
Palacios Ledo, J. 9773
Paladini, E. 4555
Palani, M. 71
Palanisamy, K. 9474
Palazón Lozano, F. 2677
Palihawadene, N. S. 5128
Palik, B. J. 3094, 3963, 9961
Paliwal, G. S. 7290
Pallardy, S. G. 5594
Pallett, K. E. 6472
Pallot, J. K. 153
Palm, C. A. 3266, 5008, 8491, 10099
Palma, B. 9436
Palma, J. L. 6442
Palma, J. M. 3776
Palmberg-Lerche, C. 3970
Palmén, A. 498
Palmer, J. 6207
Palmer, J. F. 6754
Palmer, M. W. 3882
Palmer, S. 3803
Palmisano, A. M. 9182
Palojärvi, A. 7759
Palomäki, V. 5326-5327, 6296, 6310, 6322, 8822
Palomar, M. L. 8035
Palomino, G. 8247
Palomino, P. 7177
Pal'tsev, A. M. 1658
Palubinskas, G. 6225
Palva, L. 5324
Pammenter, N. W. 839, 3385-3386, 3389
Pan, F. J. 5050, 6867
Pan, K. Y. 2053
Pan, Y. 8705
Pancholy, A. 2234
Panconesi, A. 2266, 4021, 5626, 6020, 9106

Panda, H. 6870
Panda, R. 6870
Pande, P. 3254
Pande, P. K. 7940
Pandey, A. N. 314
Pandey, D. K. 4042, 6879, 8627
Pandey, J. 2869, 6328
Pandey, O. N. 8672
Pandey, P. C. 10024
Pandey, R. K. 984, 1244
Pandey, U. 6328
Pandey, V. 5316
Pandey, V. K. 4123
Pandita, V. K. 3050
Panegassi, V. R. 7218
Paneque, L. 1557
Panesar, T. S. 5778
Panetsos, K. 4273-4274
Panetsos, K. P. 2187, 2190
Pangtey, Y. P. S. 1356
Paningbatan, E. P. 5873
Panini, T. 987
Panjab Singh 767, 2463, 7558
Panjaitan, M. 3371
Pankaj Khullar 93, 3495, 4974, 5030, 5894
Pant, N. C. 2786, 8627
Pant, S. S. 9480
Pantani, F. 8837
Pantani, L. 1037
Pantis, J. D. 683, 4803, 6331
Panton, W. J. 2005, 3935, 7256
Panwar, B. P. S. 2413
Panyutin, A. N. 5041
Panzani, R. C. 6006
Paoletti, E. 2048
Paolini, C. 5852
Papachristou, T. G. 4117
Papadopol, P. 4200
Papageorgiou, A. C. 2190
Papanastasis, V. 8489
Papanastasis, V. P. 4117, 8428
Paparozzi, E. T. 8939
Papastavrou, A. 737
Papeš, D. 5335, 5950
Papp, J. 658
Pappinen, A. 5752-5753
Papworth, M. 6370
Pâques, L. 5642
Pâques, L. E. 570, 2586, 4257
Paques, M. 8578, 9034
Paquette, S. 9597
Parabućski, S. 534
Paradella, W. R. 2767
Parajuli, P. 7386
Parameswarappa, S. 1663, 6673
Paramonov, E. G. 9518
Paraskevopoulos, S. P. 4803
Pardé, J. 6961
Pardini, A. 1558, 3273
Pardini, M. I. M. C. 5533
Pardo, R. 8788
Pardos, J. A. 7719
Parducci, L. 5511
Pardue, J. H. 1949
Paré, D. 4361
Parent, L. E. 7078
Parer, I. 6787
Parfitt, D. E. 2223, 5529
Parfitt, R. 61
Parfitt, R. I. 6097
Pargney, J. C. 4001, 5578, 6611
Pari, G. 2059, 6448
Parida, A. 8232
Parihar, D. R. 626, 5675
Parikesit, P. 10135
Paris, J. F. 1864
Parish, T. 8369, 8372
Park, B. W. 1896
Park, H. S. 8326
Park, J. H. 1813
Park, J. S. 7153
Park, K. W. 8978, 9310
Park, M. S. 8657
Park, S. 9522
Park, S. C. 5699, 7441
Park, S. K. 8656
Park, W. M. 4245
Park, Y. S. 4275, 5079, 6589
Parker, A. J. 4770, 4809, 6526
Parker, B. L. 1477
Parker, G. G. 1884, 3556
Parker, G. R. 9201
Parker, K. C. 4809
Parker, R. G. 2537
Parker, R. J. 822
Parker, S. 2289
Parker, W. H. 3980
Parkes, S. L. 8637
Parkinson, D. 4502, 5263
Parkinson, J. A. 8020
Parkinson, R. W. 6270
Parkkinen, J. 7845
Parks, C. R. 579, 586
Parks, P. J. 2515, 5986, 9256
Parlade, X. 5574
Parlanti, E. 1913
Parmelee, R. W. 1924
Parmentier, C. 2993, 3620
Parmeter, J. R., Jr. 606, 615, 9095
Parnell, J. 8972
Pârnuţă, G. 9031
Paroda, R. S. 5558
Parr, J. W. K. 8997
Parra, L. E. 2329
Parra, P. 8237
Parra Sanhueza, P. 1435
Parraguirre, L. 1438
Parresol, B. R. 6165, 7825, 8352
Parrotta, J. A. 1068, 1666, 1713, 6292, 8500
Parsons, M. 7566
Parsons, W. F. J. 1143, 2154, 4013, 8873
Parthiban, K. T. 2902
Parton, W. J. 1071, 3625, 4492, 4953, 5008
Partridge, T. R. 3898
Partzsch, M. 9304
Parvez Jalil 843, 858, 6036, 6593
Pas, J. B. van der 1537
Pascal, J. P. 3523
Pascal, N. 461, 6472
Paschalis, P. 1984
Paschke, M. W. 4841
Paschoal, M. 10067
Pascouau, M. 5884
Pascual, J. A. 9197
Pascual, M. 9775
Pascual, R. 9130
Pasgo, L. J. 967
Pashenova, N. V. 10046
Paspaliaris, P. 5352
Pasqua, G. 9830
Pasquini, A. 8792
Passarge, H. 9012
Pastor, A. 1746, 1826
Pastor, J. 1587, 3214, 4130, 9722
Pastuszyn, A. 7176
Pate, J. S. 1288
Patel, A. 8956
Patel, J. 9395
Patel, M. 10035
Patel, R. N. 1213, 2939
Paterson, J. M. 6161
Pathak, A. 1
Pathak, N. N. 6098
Pathak, P. S. 767, 2463, 2499
Pathan, R. S. 3348
Pathirana, S. M. 8269
Patil, G. P. 9580
Patil, N. G. 7439
Patil, N. K. 9115
Patil, V. S. 1690
Pätilä, A. 6068
Patiño, S. 1118, 5373, 6298
Patiño, V. M. 9562
Patiram 10087
Patma Vityakon 7567
Patočka, J. 9154
Paton, D. M. 4174
Patridge, A. D. 5661
Patridge, N. 5443
Patrono, M. F. 2780
Pattanavibool, R. 7359
Patten, D. T. 8842
Patten, R. S. 2911, 8153
Patten, T. 1162
Patterson, D. W. 6164
Patterson, M. E. 2427
Patterson, M. T. 3001, 4554
Patterson, P. 4084
Patterson, T. F. 501
Patterson, W. A., III 3877
Pattnaik, S. K. 6042
Patton, E. N. 4023
Patton, R. L. 10004
Patz, G. 7104
Paukkonen, K. 4617
Paul, D. E. 4358
Paul, E. A. 3641
Paul, J. T. 1998, 3695
Paula, J. E. de 5047, 6430, 6538, 9919
Paula, T. J. de, Jr. 602
Paule, L. 561, 1421, 5509, 8492, 9969
Pauleová, D. 3304
Paulson, D. D. 6718
Pauly, D. 1358
Pauly, G. 8928
Pausas, J. G. 3942, 5449, 7902
Pautov, A. A. 5385
Pavel Svihra 2915
Pavle, M. 5476
Pavlin, R. 3190
Pavlova, O. S. 8278
Pavlova, T. S. 7970
Pavlova, Z. 467
Pavlovsky, E. S. 2455
Pavolettoni, L. 6052
Pawlowski, K. 3150, 8264
Payandeh, B. 1616, 2690, 4200, 4417, 7820, 8703
Payer, H. D. 1126
Payette, S. 514, 1827, 2127, 2688, 4143, 8149
Payette, Y. 9986
Payn, T. W. 4394, 4402, 4542
Payne, B. 6805
Payne, C. 2473, 2755
Payne, N. J. 675, 5794, 7507
Paz Molina, M. 8237
Pazdrowski, W. 3681
Peace, E. A. 4562
Peacock, W. J. 7376
Pearce, A. J. 2910, 8375
Pearce, D. W. 2449
Pearce, J. L. 2509
Pearce, M. J. 2308, 7432
Pearce, R. B. 4571, 5011, 8313
Pearcy, R. W. 3785, 3799, 6259
Pearman, P. B. 9301
Pearse, P. H. 5192
Pearson, A. K. 1201
Pearson, H. A. 9272
Pearson, J. 3651, 3770
Pearson, M. 1970, 3022, 6498
Pearson, O. P. 1201
Pearson, S. M. 4955
Peart, D. R. 277, 1738, 3878, 4109, 5162
Pease, J. W. 37
Peat, H. C. 5145
Pece de Rios, M. 790
Peck, T. J. 3522
Pedersen, L. 6851
Pedersen, L. B. 1295, 8000
Pedras, M. S. C. 4000
Pedraza, R. M. 6949
Pedrosa-Macedo, J. H. 5683
Peet, F. G. 5778
Peet, M. M. 4688
Peet, R. K. 3075, 5922
Pei, M. H. 5647, 9119
Peinado, M. 926-927, 3082, 6548
Peine, J. D. 8444
Pekelharing, C. J. 471
Pelaez-Riedl, S. 7178
Pelfini, M. 6362
Pelissié, D. 2792
Pell, E. J. 453, 1975, 1977, 3023, 9743
Pellatt, M. G. 4757
Pelleri, F. 8658
Pellett, H. 1707
Pellicane, P. J. 3345
Pellissier, F. 2162
Pelosi, C. 1320
Pelotto, J. P. 420, 7271
Peltier, J. P. 1936
Peltier, R. 4952, 8423, 8431, 8554
Peltola, H. 6822, 7033
Pemberton, I. J. 9823
Pemberton, R. W. 3172
Pémoulié, J. M. 7141
Peña, L. 5843
Peña Cornejo, A. 3325
Peñalba, M. C. 2133
Penalva, F. 7817
Penas, A. 6403
Pendje, G. 6981
Peneva, V. 9181
Peng, C. H. 2125
Peng, S. L. 1139
Peng, W. T. 8201
Pengelly, S. M. 7138
Penhoat, C. H. du 3757
Penhoat, C. L. M. H. du 8089
Pennanen, T. 7939
Pennarun, A. M. 3763
Penner, M. 1643, 4186
Pennes, J. M. 5934
Pennington, R. T. 6600
Penttinen, M. 5215
Peñuelas, J. 5199
Pepin, S. 1609
Pera, J. 5574, 5615
Peralta, F. J. A. 619
Peralta, J. 2142
Percy, K. E. 2450, 9749
Percy, M. 4457
Percy, R. E. 1609
Perdry, D. 3505
Peredo, H. L. 4009
Pereira, J. 2921
Pereira, J. M. M. 5729
Pereira, J. P. 7132
Pereira, J. S. 1930, 4752, 7913
Pereira, J. T. 7228
Pereira-Sheteolu, O. 394
Perera, A. N. F. 1799
Peres, C. A. 474, 3060, 3220, 8441
Peres Filho, O. 3181
Perevolotsky, A. 7407
Perevoznikova, V. D. 9937
Pérez, C. 117
Perez, L. 1763
Pérez, P. 1458
Perez, S. C. J. G. de A. 2570, 6035
Pérez-Amador, M. C. 1242
Pérez Antelo, A. 2441
Perez Bravo, P. 1458
Pérez Fortea, V. 9147
Perez-Garcia, J. M. 7688
Perez-Morales, C. 6403
Pérez-Parron, M. A. 117
Pérez-Soba, M. 1966, 3645, 3789, 5290
Perfecto, I. 3438
Peri, P. 6170
Periapperuma, K. 5348
Perin, E. 9881
Périnot, C. 4257
Peris, S. J. 8368
Perkins, L. R. 6906
Perkins, P. V. 6708
Perkins, T. D. 7036
Perkocha, V. 2958
Perl, M. 1012
Perny, B. 9167, 9196
Pero Martinez, M. A. del 420
Peroni, P. A. 3029, 3951, 7725
Perpeet, M. 9615
Perpiñal, E. 7119
Perra, B. 6461
Perret, P. 4317
Perrin, R. 5574
Perron, M. 9045
Perrone, V. 1467
Perry, A. R. 5003
Perry, D. 3156, 3589
Perry, D. A. 327, 5271, 6610, 7388
Perry, E. 5133
Perry, G. M. 9398

Perry, M. A. 166, 1771
Perry, N. 1806
Perry, R. L. 10000
Perry, S. A. 8781
Perry, T. J. 2264, 7399
Perry, W. B. 8781
Persson, A. 4637, 8008, 8544
Persson, B. 990, 3368, 3374
Persson, G. 3335
Persson, H. 406, 3419, 3572, 5319, 7749-7750, 8047, 9460, 9684
Persson, O. A. 7981
Persson, T. 7888
Perterer, J. 4565
Perttu, K. L. 3305
Pery, M. 9718
Perzanowski, K. 4913
Peshkov, V. V. 2914
Pess, G. 6698
Pessi, A. M. 2112
Peszlen, I. 1986
Petäjistö, L. 8411
Peterken, G. F. 10081
Peters, B. C. 7421
Peters, H. 1555
Peters, J. R. 1022
Peters, K. 331, 8841
Peters, N. E. 8374
Peters, R. 3906
Peters, R. J. B. 2904
Peterschmitt, E. 1361
Peterson, C. E., Jr. 1964
Peterson, C. J. 6567, 7312
Peterson, C. M. 8458
Peterson, D. L. 1045, 1338, 1416, 4990, 7107, 10161
Peterson, D. W. 4990
Peterson, J. L. 2293, 4868
Peterson, K. M. 1895
Peterson, L. C. 8645
Peterson, N. C. 8298
Peterson, R. L. 6613, 7387, 9072
Peterson, U. 1866
Petersson, G. 4564
Pétiard, V. 1696
Petit, H. 8746
Petit, R. J. 7374
Petit, S. 7555
Petrakis, P. V. 8686
Petranka, J. W. 3195
Petrides, G. A. 7622
Petrides, O. 7622
Petrini, L. E. 5654
Petrini, O. 2226, 5654, 5664
Petropoulou, Y. 7027
Petrov, A. 2482
Petrov, A. P. 8751
Petrov, A. V. 10017
Petrova, N. V. 1920
Petrussa, E. 9845
Pettenella, D. 159, 3340, 6373
Pettersson, C. 8795
Pettersson, N. 5624, 9520
Pettersson, R. B. 10029
Petty, J. A. 9519
Petty, S. J. 5825
Petty, W. H. 1076
Peuke, A. D. 7995
Peumans, W. J. 5563
Peura, P. 3653
Peyratout, C. S. 8103
Peyron, J. L. 1017
Pezeshki, S. R. 1120, 3397, 3606
Pfanz, H. 456, 2878, 2948
Pfeffer, P. E. 8282
Pfeifer, T. A. 7455
Pfeiffer, S. 3660
Pfeifhofer, H. W. 6818
Pfenninger, I. 2879
Pfetscher, G. 5151
Pflaum, G. 6894
Pflugmacher, S. 4705
Pharasi, S. C. 7052
Pharis, R. P. 5479
Philip, E. 7410
Philipp, P. 9153
Philippe, M. 7009
Philipson, J. J. 8952
Phillips, A. 7301
Phillips, C. L. 7425
Phillips, G. 13
Phillips, J. G. 3595
Phillips, O. L. 3958, 5447
Phillips, S. L. 6303
Phillips, V. D. 913, 4839, 9598
Phillips, W. E. 4372
Phillipson, J. D. 8691, 8916
Phipps, C. J. 5378
Phuong, N. N. 4125
Phuphathanaphong, L. 8973
Piaceri, E. C. 7068
Piare Lal 94
Piat, J. 3816
Piatt, J. F. 10066
Picard, J. F. 1512, 1740, 3290, 4303, 4991
Piccolo, M. C. 8826
Piché, Y. 3772, 5598-5599, 9998
Pichorner, H. 3660
Pickens, J. B. 9703
Pickett, S. T. A. 3109, 5359, 6567
Pickford, S. G. 1996
Picon, C. 1928, 2070
Picot, J. J. C. 9365
Picozzi, N. 688, 4929
Pidsley, S. M. 6553
Piearce, G. D. 775, 7203
Piemontese, S. 3273
Pienaar, L. V. 8052-8053
Piene, H. 639
Pier, D. 8820
Pier, P. A. 3667, 8010
Pierce, J. T. 9258
Pierce, L. E. 3525, 7012
Pierce, L. L. 1346, 7011
Pierce, P. A. 4046
Pierce, R. S. 3621
Pierce, T. E. 8011
Pierrat, J. C. 4433
Pierson, E. D. 6266
Pierson, R. 1846
Pieterse, P. J. 169, 8646
Pietikäinen, J. 5273
Pietrarelli, L. 7119
Pigliucci, M. 1437, 5554
Pignatti, E. 3074
Pignatti, G. 1744, 7692
Pignatti, S. 3074
Pigott, C. D. 3610
Pigott, J. P. 10121
Pigott, S. 3610
Piha, M. I. 7563-7564
Piispanen, R. 2984
Pike, D. B. 3512
Pilaar, C. H. 8400
Pilapitiya, U. 8688
Pilar Bañados, M. 5534
Pilard-Landeau, B. 3816
Pilate, G. 4812, 7375
Pilcher, J. R. 9315
Pilka, A. 2241
Pillai, A. G. 9761
Pillai, S. R. M. 2300, 2448
Pilling, M. J. 8499
Pillsbury, N. H. 4390, 6163
Pilon, C. E. 2811
Pimenta, H. R. 3176
Pimentel, D. 7574
Pimentel da Silva, L. 8871
Pınar, N. M. 8124
Pinard, M. 1405
Pinazzo, J. 1577
Pineau, M. 4939, 9597
Pineda, F. D. 3307, 3705, 3871, 8407
Pinglo, F. 244
Pinheiro, A. L. 3742, 9898
Pinheiro, C. U. B. 7799
Pinho, S. Z. de 4283
Pinkerton, J. N. 8312
Piñol, A. A. 9563
Piñol, J. 5249
Pinon, J. 3807, 4019, 10013
Pinto, C. A. B. P. 5081
Pinto, J. E. B. P. 5081
Pinto, L. 5128
Pinto, M. M. V. 3900
Pinyopusarerk, K. 2662
Pinzauti, S. 6260, 8602
Pinzón-Picaseño, L. M. 7397
Piotto, B. 9439
Piou, D. 3165, 3186, 3815, 5757
Piovesan, G. 1320
Pireaux, J. C. 5577
Pirintsos, S. A. 3945
Pisanelli, A. 9271
Pisarenko, A. I. 9408
Pita, G. P. A. 6829
Pitelka, L. F. 2865
Pitman, A. J. 7678
Pitpreecha, K. 5050
Pitt, D. G. 5139
Pitt, M. D. 1745
Pitzen, H. 2566
Pividori, M. 6114, 8838, 9535
Plamondon, A. P. 1110, 3608, 8931
Planas, D. 8832, 9737
Plantinga, A. J. 3630
Plassard, C. 5576, 8257
Platje, E. R. P. 150
Platt, I. 6297
Platt, K. 6745
Platt, K. H. 471
Platt, W. J. 4754
Plaugher, E. T. 8692
Pleines, V. 3466
Pleninger, A. G. 8460
Pletschet, S. M. 8367
Ploeg, J. L. vander 128
Plomion, C. 8222, 8228
Plonczak, M. 6025
Plourde, A. 9871
Plümacher, J. 4674
Plumptre, A. J. 4057
Pluth, D. 6284
Pluth, D. J. 2490, 3410-3411
Poddighe, D. 6066
Podger, N. 2758
Podgórski, M. 1869
Podila, G. K. 2221, 4834, 5544, 5560, 9078
Podogas, A. V. 2181, 8193
Poe, M. P. 332
Poedjorahardjo 6002
Poeppel, S. 9383
Pofahl, U. 999
Poffenberger, M. 1014
Pogue, D. W. 6679
Pöhhacker, R. 7907
Pohja, T. 5324, 6351
Pohjonen, V. 6972
Poiarkov, V. A. 5308
Poidy, N. 7573
Poinsot-Balaguer, N. 7930
Poirier, M. 7078
Pokhriyal, T. C. 151, 6147
Pokojska, U. 1958
Polak, A. M. 7274
Poland, T. M. 2345
Połap, E. 7156
Polcher, J. 3255, 9759
Pole, M. S. 497
Polishook, J. D. 9067
Politov, D. V. 8223
Pöll, E. 983
Pollack, J. C. 163
Pollak, R. 1730
Polle, A. 466, 2883, 3642, 3662, 4679, 5299, 5543, 6338, 6481, 7099, 8933
Pollet, D. K. 2375
Polley, H. W. 5227
Pollock, C. 3137
Pollock, D. S. 1124
Pollock, K. M. 7641
Pollock, M. 1572
Polyakov, A. F. 4976
Polyakov, V. I. 9625
Polyanskaya, L. M. 8278
Polyméris, C. 6386
Pomeroy, M. K. 119, 7740
Pomeshchikov, S. P. 4603
Pominville, P. 8621
Pommerening, A. 4228
Ponchia, G. 6031
Pond, E. 9076
Pond, S. E. 5079
Ponder, F., Jr. 8625
Ponder, H. G. 8457
Ponge, J. F. 1918, 3437, 3588, 3688, 7877
Pongracic, S. 2697
Ponoy, B. 4827
Pons, O. 7374, 9060
Pons, T. 7193
Pons, X. 1863, 6228
Pontanier, R. 8420, 9265
Pontinhas, A. A. S. 2750
Pontoppidan, A. 10154
Pook, E. W. 372, 4608
Poore, D. 7586
Poorter, L. 1334
Pope, C. A. III. 9398
Pope, K. O. 1864, 6997
Pope, P. E. 2895, 9539
Popescu, E. 8604
Popescu, N. 9040
Popivshchiĭ, I. I. 2667
Popov, E. G. 3796
Popov, V. E. 7815
Popova, A. V. 7815
Popova, L. G. 463, 1268
Porembski, S. 9923
Porteck, K. G. 7784
Porter, G. 5864
Porter, J. H. 3666, 8172
Porter, J. R. 6097
Porter, N. G. 499
Porter, P. S. 2860
Porter, W. F. 4226
Portoghesi, L. 7833
Portugal, Institute of Forestry 6249
Posch, M. 1163, 5338
Poschen, P. 822
Posner, N. E. 1884
Poso, S. 1850
Pospíšilová, R. 8685
Possingham, H. P. 1525, 7139, 9216, 9225
Postl, W. 7197
Postl, W. F. 468
Pot, B. 8266, 9071
Pot, S. 7193
Potasheva, M. A. 9740
Potgieter, M. J. 399, 2961, 3849
Poth, M. 7107
Poth, M. A. 8845
Pothier, D. 6814, 9491
Potter, A. 6446
Potter-Witter, K. 813, 2523
Potts, B. M. 494, 4182, 5556, 7724, 8094, 8245, 9053
Potts, D. F. 3676
Potts, W. 4876, 4897
Potvin, C. 3978, 9666
Poucke, G. van 8558
Poulsen, K. M. 77, 82
Poulson, T. L. 3906
Poupard, C. 3404
Poutsma, J. 1519
Pouyat, R. V. 5359
Powell, D. B., Jr. 3452
Powell, D. S. 2731
Powell, G. L. 3377, 8217
Powell, G. R. 4878, 9787
Powell, G. W. 1745
Powell, M. H. 3309
Powell, R. A. 6783
Powell, W. 5528, 5548
Power, A. B. 5387
Power, J. M. 5022
Power Farming 1794
Powers, H. R. 10021
Pöykkö, T. 7345, 7353, 9973
Pozo, V. del 7177
Pozuelo, J. M. 1897
Praag, H. J. van 1445
Prabakaran, J. 1677, 1682, 2237
Prabhu, B. R. 8619
Prach, K. 3949
Pradeep Khanna 3357, 8555, 9389
Pradhan, I. P. 713
Prado, C. H. B. A. 5407
Prado, G. 9490
Prado, M. da C. G. 1112

Prah, E. 2723
Prahacs, S. 3500
Prahlad Bora 63
Prajapati, R. C. 9579
Prakasa Rao, P. S. 9761
Prakash, A. 5897
Prakash, N. 476, 8903
Prakash, O. 9417
Prakash Mathema, P. 8490
Prakhov, A. V. 1103
Pramanik, S. K. 3832
Praml, G. 5045
Pramod Kumar 286, 1712, 1902, 7925, 9443
Prance, G. T. 748, 8962, 8995
Pranjić, A. 4726
Prasad, A. 1945
Prasad, G. S. 7806
Prasad, K. G. 130, 302, 1712, 1901, 2065, 3417, 3421, 6115, 7052
Prasad, M. N. V. 1779
Prasad, R. 843, 858, 1539, 1554, 1734, 1743, 2404, 5144
Prasanna, K. P. R. 2560
Prasodjo, S. 2758
Prat, D. 5488, 8246, 9038-9039
Pratap Narain 522
Pratap Singh, D. 4268
Prathibha, N. C. 8642
Pratibha Bhatnagar 6154, 6156, 6198
Pratiwi 1324, 1755, 2143, 7562, 8668
Pratt, J. 3169
Pratt, S. M. 2857
Pratt, T. L. 1489
Praveena, P. L. R. J. 864
Pray, H. 2913
Pražák, J. 3324
Predtechenskaya, O. O. 8802
Preece, J. E. 6096
Preeti Pande 3254
Pregitzer, K. S. 409, 2030, 3094, 3548, 3641, 3963, 5172, 5228, 6433, 6798, 7191, 9961
Preisig-Müller, R. 5535
Preložnik, V. 2682
Premlal 131, 8630
Premoli, A. C. 6590
Prendergast, B. F. 9199
Prendergast, H. D. V. 7339
Prentice, I. C. 3110, 4212, 4805
Prescott, C. E. 6288-6289, 7912
Presswood, J. J., Jr. 8444
Preston, C. M. 325, 6288, 9706
Preszler, R. W. 5719
Preto, G. 6809
Pretzsch, H. 9367, 9523, 9581
Preu, C. 768
Preuhsler, T. 1007, 9405, 9498
Prévost, A. 5578
Prévost, M. 4905
Prévot, H. 2785
Prevot, H. 259
Price, C. 2482-2483, 10097
Price, D. T. 9943
Price, K. P. 709
Price, O. 10129
Price, P. W. 7495, 9152
Prieditis, N. 1381, 8155
Prieto Rodríguez, A. 788
Priha, O. 5276, 7953
Primack, R. B. 6988
Primavera, F. 987
Primavesi, A. C. A. 7723
Primavesi, O. 7723
Prin, Y. 2238, 7389, 9994
Prince, S. D. 3546
Prins, H. B. A. 3631
Prins, H. H. T. 4065
Prins, K. 2770
Prinsloo, G. L. 7492
Prior, J. A. B. 7121
Pritchard, H. W. 8818, 9431
Pritchard, J. 7942
Pritscher, E. 4198
Priyadarsan Sensarma 191
Priyas Fernandes 6033
Probanza, A. 1923
Prober, S. M. 5559
Proctor, J. 524, 3806, 4165, 7904-7905
Proctor, M. V. 3414
Proctor, R. H. 4018
Prodhan, A. K. M. A. 6412, 8891
Proe, M. F. 1136, 3637, 5180, 6897, 7959
Proebsting, E. L. 282, 1894
Proença, C. E. B. 3027
Proffer, T. J. 4866
Profous, G. 1588
Profous, G. V. 2435, 10138, 10141
Profumo, P. 2055, 3470, 5089, 6421
Prokopovich, E. V. 7970
Prokushkin, S. G. 4604
Promdej, C. 3863
Promod Kumar, 130
Prosser, I. P. 5354
Prostor, J. 296
Protomastro, J. 7271
Proudfoot, J. 6501
Proudhon, P. 7538
Proupín Castiñeiras, J. 9773
Prout, T. R. 1812
Prouteau, M. 5092
Prpić, B. 4726, 4808, 6502
Prügel, B. 6443
Prus-Głowacki, W. 572, 2185, 6030, 9975
Prusinkiewicz, Z. 1958
Pruvost, C. 5543
Pryazhnikov, A. A. 4544
Pryor, D. 9342
Pryor, L. D. 5433
Pryor, R. D. 4390
Przyborski, W. 9379
Przybył, K. 1298, 7398
Pshennikov, A. E. 8360
Psota, V. 457, 6884
Pswarayi, I. Z. 7351
Pu, R. L. 1344
Pudjiharta, A. 1908
Puech, J. L. 4663, 9824
Puerto, A. 9924
Puff, C. 9892
Pugin, A. 3764
Puglisi, S. 4935
Pugnaire, F. I. 2853
Puig, H. 4111
Pukacka, S. 842, 2067, 7180
Pukacki, P. M. 1280
Pukkala, T. 3462, 6972, 9200, 9521, 9610, 9664, 10136
Puliafito, J. L. 4555
Puliafito, S. 4555
Pulido, C. M. 4291
Pulkki, R. E. 946
Pulkkinen, P. 866, 2112, 7034, 7039, 7731, 9874
Pulkrab, K. 10
Pullaiah, T. 7250-7251
Pullen, G. B. 5827
Pulliainen, E. 5324
Pulliainen, J. 3517
Pulliainen, J. T. 7007
Pulliam, H. R. 5461, 5817, 6990
Pulliam, W. M. 362, 6292
Puls, J. 4668
Pundir, Y. P. S. 618
Puppa, F. D. 8447
Puppi, G. 2406, 9079
Puranen, R. 2484
Purcell, M. F. 6933
Purdy, B. G. 9062
Puri, S. 3361, 3689, 4336, 10107
Purnama, B. 2475
Purnomosidhi, P. 7666, 10102
Purohit, A. N. 4119, 8432
Purohit, M. C. 6642
Purohit, S. D. 2592, 5082, 6055
Purser, M. D. 349
Purwadi 1468
Purwantari, N. D. 6621
Purwanto, E. 6700
Pussinen, A. 5026, 9376
Putra, S. 8567
Puttonen, P. 3563, 7152, 8867, 9667
Putz, F. E. 6524, 9779
Putzgruber, N. 227
Puumalainen, J. 9584
Puxbaum, H. 8015
Puxeddu, M. 6158
Puy, D. J. 9893
Puy, D. J. du 7236
Pyare Lal 140, 5114, 9470, 9544
Pyastolova, O. A. 8370
Pyatt, D. G. 2633
Pyatt, G. 6273
Pyrke, A. F. 3477
Pyszyński, W. 389
Qi, J. G. 4707
Qian, H. 6253
Qian, J. L. 8832, 9737
Qian, S. S. 2358
Qian, X. B. 1914
Qiaoping, Y. 5669
Qincai, H. 5669
Qiu, M. S. 9132
Qiu, Y. L. 579
Quackenbush, L. R. 53
Quadt, A. 2290
Quaglino, A. 6114
Qualls, S. J. 2496
Quan, J. 8518
Que, G. N. 8587
Quednau, H. D. 7774
Queen, L. 6234
Quegan, S. 7850
Quevedo, H. 540
Quevedo, R. 9
Quézel, P. 3939, 9921
Quick, R. C. 1028
Quicke, H. E. 2505
Quigley, M. F. 3317
Quine, C. 6265, 6273
Quine, C. P. 2802
Quinn, C. J. 500, 3997, 7220
Quiñones-Orfila, V. 6292
Quiring, D. T. 647, 2319, 5694, 5722, 7448
Quirion, J. C. 3846
Quist, M. E. 7885
Raaimakers, D. 7193
Raatikainen, M. 8493
Rab, M. A. 5237
Rabotnov, T. A. 5007
Race, D. 9259
Rachmawati, I. 6070
Rachwał, L. 1149-1150, 7084-7085
Racin, G. E. 35
Racine, C. H. 1980, 5342
Rada, F. 2999
Radaelli, L. 2889
Raddi, P. 5340
Raddi, S. 2191, 5510
Radhamani, A. 3991
Radicati, L. 1603
Radley, R. 4854
Radócz, L. 8321
Radosta, P. 570
Rael, R. M. 8844
Ráez-Luna, E. F. 5815
Rafarel, R. 5242
Raffa, K. F. 3182, 5724, 7482, 7490
Raffel, D. 919
Raffle, V. L. 9997
Raffy, M. 3509
Rafii, Z. A. 2195
Rafiq, M. 3347
Ragazzi, A. 9112
Rageau, R. 4732
Raghava, R. C. 9759
Ragno, D. 9582
Ragoutis, A. 8796
Ragozzino, A. 5668, 5670
Rahardjo, A. W. B. 1481
Rahimian, H. 8315
Rahman, G. M. M. 6612
Rahman, H. 6741
Rahman, M. A. 2270
Rahman, M. F. 6177
Rahman, S. 5097
Rahman, Y. A. 6926
Rahman, Y. M. A. 7354
Rahmati, K. 304
Rai, A. M. 9248
Rai, B. 9933
Rai, L. K. 1410
Rai, M. 5558
Rai, M. K. 6152
Rai, P. N. 4110
Rai, R. 2875
Rai, R. S. V. 545, 1680, 2902
Rai, S. C. 1410
Rai, S. N. 1689, 2099
Raičević, M. 2314
Raich, J. W. 321, 4191
Raikes, J. A. 7527
Raimbault, P. 1208, 7610
Raimondi, V. 1038
Raina, A. K. 7052
Raina, S. N. 8232
Rainey, W. E. 6266
Raintree, J. B. 3356
Raise, G. 2337
Raisio, J. 8233
Raison, R. J. 1096, 2697, 5110, 7927
Raitio, H. 4617, 6455
Raizada, A. 1942
Raj, D. 1615
Raj, S. F. 6762
Raja Barizan, R. S. 1128
Rajanna, L. 7801
Rajasekaran, P. 874, 5098
Rajasekhar, A. 610
Rajchenberg, M. 8288
Rajendran, A. 6522
Rajendran, N. 6113
Rajendran, S. 4122
Rajesh Sharma 2786
Rajh, A. 1523
Rajinder Singh 3586
Rajiv Kumar 9251
Rajive Kumar 730
Rajora, O. P. 5517, 7370-7372
Raju, G. 7834
Rakestraw, J. L. 273
Rakhshinda Panda 6870
Rakotovao, G. 8858
Rakotozafy, A. 3083
Rakow, D. A. 2829
Rakowski, K. J. 6349, 9854
Ralph, C. J. 10066
Ram Prasad 843, 858, 988, 1539, 1554, 1734, 1743, 2404
Ramachandra Guha 819
Ramachandran, K. K. 695
Ramakrishnan, P. S. 3236, 4785, 7309
Raman, N. 2941, 3157
Ramanathan, T. R. 1013
Ramanoelina, P. A. R. 9891
Ramantha Rao, V. 7714
Ramanuja Rao, I. V. 6767
Ramaraj, B. 1442, 3153
Ramassamy, V. 7165
Ramawat, K. G. 6889, 7162
Rambal, S. 3508, 4077
Ramesar, N. 8084
Ramesh, S. 8079
Ramesh Dayal 7601
Rametta, M. 5912
Ramírez, C. 9991
Ramírez, N. 1308
Ramírez-García, P. 7264
Ramírez-Martínez, M. 7476
Ramírez-Zurbía, R. 7476
Ramjee Srivastava 9248
Ramkarn Gaur 1488
Ramm, C. W. 813
Ramón Vallejo, V. 7902
Ramos, B. 1897
Ramos A., C. H. 7244
Ramshe, D. G. 6726
Ramsteck, O. A. 1563
Ramstedt, M. 5643, 8317
Ran, S. 6364
Rana, B. S. 682
Ranasinghe, D. M. S. H. K. 5294
Rance, B. D. 4756
Rand, A. S. 5932
Randall, A. 2483

Randlett, D. L. 3548
Randolph, J. C. 8444
Randrianasolo, A. 493
Rangaswamy, C. R. 1721
Ranger, J. 1137, 1994, 3820, 4302, 4488, 7074
Rani, V. 8232
Ranil Senanayake 3270
Ranjithakani, P. 1365
Rank, N. E. 654
Ranker, T. A. 500
Rankin, L. J. 7479
Rankka, N. 5955
Ranneby, B. 6212, 9599
Ranney, T. G. 2589, 4688, 8575
Rannorey, D. K. S. K. 4100, 8678
Ranson, J. K. 785
Ranson, K. J. 1031, 1039-1041, 1044, 1854, 3116
Ranta, H. 8304, 9117
Rantanen, L. 5326-5327
Rantio, T. 6455, 7989
Rantio-Lehtimäki, A. 1650, 7711, 9874
Rao, A. N. 7714, 8583
Rao, A. V. 8263
Rao, B. R. P. 7251
Rao, B. R. R. 8079
Rao, C. S. V. R. 7291
Rao, D. L. N. 7561
Rao, G. M. N. 523
Rao, I. V. R. 6767
Rao, J. V. S. 5428
Rao, K. S. 8426
Rao, M. K. V. 2116, 7253
Rao, M. R. 8679
Rao, M. R. G. 9559
Rao, M. S. R. M. 713, 2395
Rao, M. V. 596
Rao, N. R. 4099
Rao, N. S. 107, 1804
Rao, O. P. 3106
Rao, P. S. 419, 6033
Rao, P. S. P. 9760-9761
Rao, R. G. 4676
Rao, R. N. 10092
Rao, R. R. 5439
Rao, R. V. 4673
Rao, S. R. S. 5428
Rao, T. A. 2120
Rao, V. R. 7714
Rao, Y. S. 3356, 9388
Rapczewska, L. 8684
Rapey, H. 5876, 5880, 7580
Raphael, M. G. 1331, 6783, 10066
Rapp, C. 1593, 1742
Rapp, M. 1330, 8614
Rappaport, N. G. 7473
Rappenhöner, D. 7252
Rappole, J. H. 3198
Raschi, A. 3607, 7031, 7070
Rascio, N. 458, 2055, 6421
Rashbrook, V. K. 620
Rashid, M. A. 588
Rashid, M. H. 6075
Rashida Qasium 7192
Rasmussen, L. 330, 3310, 3581, 3632, 3664, 5244, 6354, 7650, 7819, 8001
Rasmussen, P. E. 8854
Rasmussen, S. 9623
Rasmussen, W. O. 738
Rastin, N. 7049
Rastogi, A. 3358, 7696
Ratajczak, E. 9379
Rathore, N. S. 7
Rathore, S. S. 3274
Rathore, T. S. 3402
Ratkowsky, D. A. 6190
Ratnayeke, S. 1375
Ratter, J. A. 524, 4165
Raturi, R. D. 4673
Rátz, T. 8744
Rau, N. 1147
Rauf, K. 7803
Raulund-Rasmussen, K. 1085, 7962
Raunemaa, T. 1955
Raupp, M. J. 2374, 4899, 6665
Rauret, G. 5307
Rauš, Đ. 4363, 4724, 4726, 4775, 4778, 4808, 4987
Rauscher, H. M. 1960
Rauscher, M. 4956, 8521
Rauste, Y. 3517
Ravan, S. A. 9638
Ravelo, A. G. 4744
Ravensbeck, L. 3969
Raverkar, K. P. 882
Ravi Kumar 1737, 1993, 3689
Ravindra Kumar 213, 8672
Ravindranath, N. H. 4106
Ravlin, F. W. 2324, 5720-5721, 9151
Rawal, R. S. 1356
Rawat, B. S. 577
Rawat, J. K. 1798, 2521, 4120
Rawat, L. 8782
Rawat, M. S. 97, 100, 7210
Rawat, P. S. 617, 7433, 8564
Rawat, R. S. 1354
Rawat, V. K. 2371
Rawat, V. R. S. 3417
Rawat, Y. S. 78, 535, 3254, 3864, 6540-6541
Ray, D. 2412
Ray, J. 4342
Ray, J. W. 1758
Ray, M. 8548, 9404
Ray, P. N. 5189
Rayachhetry, M. B. 9090
Raymond, C. A. 4182, 7461
Raynal, D. J. 2855, 3666, 8705
Raynal-Roques, A. 8322
Raza-ul-Haq 5132, 5465
Reader, R. J. 3427
Reams, G. A. 3476, 5915
Reardon, R. 5793
Reardon, R. C. 9199
Rebbeck, J. 2864, 6344, 9749
Reddell, P. 2227, 5590, 6622
Reddi, C. S. 9867
Redding, K. D. 941, 3781
Reddy, A. N. Y. 70
Reddy, D. M. V. 2560
Reddy, G. B. 8003, 9738
Reddy, K. K. 102, 104, 864, 4969
Reddy, M. B. 6151
Reddy, M. N. 610
Reddy, M. S. 4850, 8267
Reddy, T. V. 2560
Redfern, D. 3169, 6501
Redfern, D. B. 2262-2263
Redfern, M. 2368
Redford, K. H. 697, 5813
Redhead, S. A. 4870
Reece, P. H. 6813
Reed, A. S. 210
Reed, B. M. 5102
Reed, C. 7629
Reed, D. 6237
Reed, D. D. 217, 1181, 4208, 4223, 4431, 4460, 5172
Reed, D. J. 7304
Reed, D. P. 1765
Reed, P. C. 2467, 2473
Reeler, B. M. 7563-7564
Reem, A. M. 5481
Rees, B. J. 5597
Rees, R. G. 3032
Rees, T. ap 9853
Reeves, H. C. 365, 6378
Reffye, P. de 9356
Regan, P. A. 5073
Regelbrugge, J. C. 380, 6381
Régimbal, J. M. 2972
Regina, I. S. 1933
Rego, F. 2921
Rego, F. C. 7133, 7140
Regunaga, M. 5042
Rehfeldt, G. E. 1429, 2184, 3337
Rehfuess, K. E. 1424, 6554, 7057
Reich, P. B. 2492, 3718, 4686-4687, 6030, 6569, 8043, 9017, 9752
Reich, R. M. 1027
Reichardt, P. B. 4915
Reichel, H. 623
Reichelt, L. 7103
Reid, A. 5034
Reid, C. D. 2080
Reid, J. B. 494, 3768, 4182, 8245
Reid, M. 3291
Reid, N. 4879
Reid, R. 6999
Reif, A. 3902
Reigosa, M. J. 7313, 7315
Reilly, A. E. 1078
Reimat, M. J. 5979
Reinartz, J. A. 2157
Reindl, J. 10057
Reinds, G. J. 1163, 5338
Reiners, W. A. 319, 2154, 2409
Reinert, R. A. 9738
Reisinger, T. W. 2895, 3452, 4579
Reissinger, M. 5334, 6342
Reiter, H. 884
Reitsma, L. 281
Rejmánek, M. 3097
Relle, M. 9046
Remacle, J. 4082
Remadevi, O. K. 9150
Remitti, P. 10126
Remote Sensing of Environment 4178
Rempel, R. S. 9208
Remphrey, W. R. 2947, 2956, 4619
Remus, G. 1255
Remy, F. 3846
Remy, J. C. 8257
Ren, H. D. 9058
Ren, Z. 6299
Ren, Z. G. 2119
Renaud, J. P. 3227, 5840, 9928, 10090
Renda, A. 1086, 1556
Renesse V. Duivenbode, J. A. V. D. 2904
Renfro, J. R. 9744
Renger, M. 2833
Renhorn, K. E. 10029
Rennenberg, H. 466, 1134, 2883, 5543, 5582, 6481, 8099
Renner, S. S. 6518
Rennie, J. C. 2733, 5952
Rennie, P. J. 1228
Rennolls, K. 4209, 6179
Renuka, C. 7714
Renzoni, G. C. 7100
Repo, T. 3013, 7040, 9360
Rescia, A. J. 3871, 8407
Restrepo, G. 2222
Reuther, G. 5096
Reuveni, O. 2964-2965
Revue Forestière Française 820, 957
Rey, F. 8788
Rey, M. 6436
Rey-Benayas, J. M. 1864, 6997
Reyes, O. 9774
Reymond, I. 8578
Reynaud, I. 2130
Reynolds, B. 353, 360, 4081, 5242, 8020, 8025, 8864
Reynolds, C. J. 3086
Reynolds, J. F. 6432
Reynolds, K. M. 1491, 4892
Reynolds, L. 5060, 8421
Reynolds, P. E. 6931, 8633-8634
Reynolds, T. 1252, 9801
Reynolds, V. 4057
Reza, N. A. 6172
Rezende, C. E. 1092
Rheker, J. R. 2718
Rhijn, P. van 8270
Rhoades, C. 8430
Rhoades, C. C. 5350
Rhodenbaugh, E. J. 172, 1766-1767
Rhodes, H. L. H. 8294
Rhodes, I. 7850
Rhodes, T. E. 6531
Riba, M. L. 1186
Ribbens, E. 4206
Ribe, R. G. 5900
Ribed, P. S. 7847
Ribeiro, A. 9798
Ribeiro, C. 8026, 8048, 8767
Ribeiro, E. 1844
Ribeiro, S. P. 3176
Ricaud, S. 3761, 6422
Riccardi, F. 2609
Rice, K. J. 4517
Rice, W. J. 3539
Rice-Oxley, S. B. 2391
Rich, A. C. 4922
Rich, P. M. 1409, 5376
Richa 3380
Richard, B. 8078
Richards, J. A. 7677
Richards, K. S. 4087
Richards, M. 2723, 5967
Richards, M. B. 531
Richards, N. A. 2437
Richardson, B. 4342
Richardson, C. J. 3657, 7546, 8152, 9722
Richardson, D. M. 529, 1193, 9359
Richardson, J. 8478
Richardson, J. L. 8791
Richardson, S. D. 2725
Riche, E. A. N. le 3206
Richer-Leclerc, C. 6250
Richmond, G. S. 192, 4264
Richter, A. 7991, 9499
Richter, C. M. 3805, 7208
Richter, D. D. 5355
Richter, D. L. 9078, 9703
Richter, H. M. 8787
Ricker, M. 4742
Rico, M. 1824, 1933, 9924
Rico, M. de L. 8967
Rico Arce, M. L. 9979
Rico-Gray, V. 6528
Ridder, H. W. 7067, 7070
Ridder-Numan, J. W. A. 8906
Ridgway, R. L. 5725, 5799, 7498
Riding, R. T. 3127, 5562, 9786
Ridley, G. S. 5650
Ridoutt, B. G. 3768, 4627
Riebeling, R. 7983
Riebsame, W. E. 4953
Riechers, G. 7986
Riechers, G. H. 7986, 8105, 8845
Riedel, L. G. H. 5773
Riederer, M. 6404
Rieger, H. 9708
Riek, W. 2833, 4524, 10159
Riemenschneider, D. E. 3999, 6605
Riemer, T. 9578
Riéra, B. 6570, 7009
Riera, P. 8448
Riera S., V. 1370
Rieseberg, L. H. 5518, 5547
Riet, A. van 4676
Rietbergen, S. 7593, 9395
Rietveld, W. J. 7689, 9322
Rifai, M. A. 2480
Riffe, C. 1913
Rigault, F. 8887, 9247
Riggio Bevilacqua, L. 2055
Rigling, D. 7412
Rigling, L. 4721
Rignot, E. 2755
Rignot, E. J. M. 1029-1030
Rigolot, E. 7621, 8879
Rigou, L. 8257
Riha, S. J. 3595
Riitters, K. H. 8736
Rijkenberg, M. J. 9476
Rikala, R. 902, 3802, 6081
Rikhari, H. C. 682
Riley, K. L. 9097
Riley, L. F. 3356, 9620
Riley, R. H. 4191, 7882
Riley, T. V. 206
Rimbawanto, A. 6026
Rinaldi, L. M. R. 3468, 4371
Rincón, E. 6309
Ring, E 1095
Ring, E. 7044

Ring, M. 7455
Ringrose, S. 1867, 2763
Rink, G. 834, 5059, 5540, 6602
Rinne, P. 1209, 3767, 3804
Río, L. A. del 3776
Riom, J. 3810, 4036
Ríos Trigoso, J. 6431
Rioux, D. 7160
Rioux, J. A. 6250
Riov, J. 2964-2965, 6629
Ripetti, V. 8576
Ripken, H. 10131
Ripperger, H. 8085
Ripple, W. J. 2730, 4132
Riquelme, A. 8100
Risenhoover, K. L. 3231
Riser, J. 7296
Rishi, R. R. 2251
Rishworth, C. 10063
Rist, M. 739
Ristic, Z. 272, 275
Rita, H. 1129, 9427
Rita, I. 8569
Ritchie, C. A. 8977
Ritchie, G. A. 3403, 4652-4653
Ritchie, J. C. 17, 9641
Ritchie, M. W. 2946
Ritland, K. 2110
Ritter, G. 7104
Ritter, S. 9441
Ritz, G. F. 616
Riva, G. 8553
Rivas, J. 1236
Rivas-Martínez, S. 3939, 9921
Rivera, C. 3049
Rivera, D. 7809
Rivera Ospina, D. 1314
Rizk, N. 2484
Rizzo, D. M. 9094
Rizzotto, M. 5438
Roath, R. L. 6723
Robb, J. R. 6686
Robbins, J. 2366
Robbins, J. A. 68
Robblee, M. B. 4481
Robert, D. 252
Robert, D. R. 3760
Robert, M. 3624
Roberts, A. J. 735
Roberts, B. A. 249, 3866
Roberts, B. R. 4510
Roberts, D. A. 1932, 7843
Roberts, D. L. 8298
Roberts, D. R. 1220, 3565
Roberts, D. W. 1870
Roberts, F. K. 4762
Roberts, G. 5830
Roberts, J. 3605, 3784
Roberts, J. D. 353, 8790
Roberts, J. M. 3736
Roberts, L. E. 8311
Roberts, M. F. 8916
Roberts, M. R. 4581, 8623
Roberts, N. J. V. 5991
Roberts, P. J. T. 7680, 9354-9355
Roberts, R. K. 4245
Roberts, S. D. 2963
Roberts, T. H. 7513
Robertson, G. P. 7642
Robertson, P. A. 3096
Robertson, S. A. 757
Robertson, W. B., Jr. 3197
Robertson, W. H. 4118
Robič, D. 9862
Robichaud, P. R. 5134
Robina Saleem 7172, 8907
Robinson, A. D. 8463
Robinson, A. P. 2501
Robinson, C. F. 4354
Robinson, D. 5300
Robinson, D. C. 2882
Robinson, J. G. 697
Robinson, J. M. 1146
Robinson, L. A. 8762
Robinson, N. 6752
Robinson, R. 9689
Robinson, S. K. 6676
Robison, D. J. 3182, 5724
Robitaille, A. 252, 7004
Robitaille, G. 278, 9676, 9694
Robson, A. J. 3670
Robson, K. J. 3233
Roby, K. B. 8033
Roca, C. 5307
Roccatagliata, E. 9636
Rocha, D. C. 7218
Rocha, H. R. da 8871
Rocha, R. 8568
Rochange, F. 9063
Rochayat, N. 1613-1614
Roche, P. 3959
Rocher, T. R. de 4379
Rock, B. N. 785, 1059, 1256, 3658, 4034, 7840
Rockenbach, J. 9818
Rockwood, D. L. 878, 6098, 9511
Rodà, F. 2653, 3415, 5249, 7548
Rode, M. W. 7961
Roden, D. B. 637
Roden, J. S. 3785, 3799
Roden, M. J. 6931, 8633-8634
Rodenkirchen, H. 8166
Rodenkirchen, R. 8787
Roder, W. 8409
Rodgers, A. R. 9208
Rodgers, H. L. 6654
Rodgers, W. A. 2844
Rodin, A. R. 2564
Rodrigo, T. M. A. S. K. 5851
Rodrigues, A. M. 6829
Rodrigues, J. D. 4283
Rodrigues Veiga, J. E. 5217
Rodríguez, A. 3383
Rodriguez, A. P. M. 118
Rodríguez, F. 2925
Rodríguez, R. 6436, 7177
Rodriguez, S. 6795
Rodríguez Añón, J. A. 9773
Rodríguez-García, M. I. 585, 7177
Rodríguez López, A. 7817
Rodríguez Murillo, J. C. 2849
Roeder, A. 8744
Roederer, Y. 2238
Roelofs, J. G. M. 2617, 3665, 5323
Roeper, R. A. 5743
Roesch, F. A. 2734
Rogatis, A. de 8585
Rogers, A. L. 711
Rogers, D. L. 4263
Rogers, E. 5366
Rogers, G. M. 4765
Rogers, M. F. 1580
Rogier, P. 4642
Rognstad, A. T. 3378, 3829
Rogozynski, M. W. 4349
Rohde, M. 2344
Röhle, H. 1007
Rohr, R. 1691, 2187
Röhrig, E. 4323, 8660
Rohwer, J. G. 4837
Roider, G. 3649
Roininen, H. 5768, 6492, 7472
Roitto, M. 5956
Rokad, M. V. 314
Rokich, D. P. 8180
Roldán, A. 4002, 9083
Roldão, M. I. F. 6891
Rolf, K. 2809, 5911
Rolfe, G. L. 8919
Rolland, C. 6968, 7860
Rolland, G. 7706
Rolle, W. 4708
Roloff, A. 1593, 6923, 9781
Romagnoli, M. 8942
Romagnoli, S. 435
Romane, F. 4317, 8244, 8614, 8862
Romano, A. 5100
Romano, D. 4461
Romano, G. B. 9779
Romanovskiĭ, M. G. 2564
Romanyà, J. 7889, 7911
Rombold, J. S. 616
Romeo, J. T. 8958
Romero, D. 8006
Romero, M. 274
Romero, M. I. 3903
Rominger, E. M. 5809
Romiti, C. 8290
Romme, W. H. 1200
Romo, G. 8247
Rompaey, R. S. A. R. van 1334
Rona, J. P. 3763
Rončák, P. 7089
Ronde, C. de 126, 294, 4613
Rondeau, G. 7536
Rondeux, J. 3298, 4432
Rondón R., J. A. 5368
Rongier, G. 3673
Rönnberg-Wästljung, A. C. 4838
Rood, S. B. 1118, 3795, 6507
Room Singh 706, 7269
Roos, A. 6243
Root, R. G. A. 7193
Rooyen, M. W. van 8391
Rooyen, N. van 3206, 5451, 8160
Roque, N. F. 8086
Roquebert, M. F. 2228
Roques, A. 5677
Rørstad, P. K. 2784
Rosa, M. C. de 9830
Rosa, N. de A. 1174, 2767
Rosacker, J. 8406
Rosado, S. C. S. 5598-5599
Rosales, J. 517
Rosbrook, P. A. 2227, 6622
Rose, A. B. 471
Rose, D. W. 8508
Rose, J. A. 6564
Rose, R. 907, 1725, 5014
Rosén, E. 3097
Rosen, K. 7129
Rosenberg, D. K. 7522
Rosenbrock, P. 8784
Rosendal, G. K. 5023
Rosengren-Brinck, U. 2614
Roshetko, J. M. 2419-2420
Rosier, P. T. W. 3605, 3784
Roskoski, J. P. 1138
Roslan Ismail 777
Rösler, E. 6835
Rösler, R. 4235, 6843, 9930
Rosli, A. W. 8590
Rosli, H. J. 7307
Rosli, J. H. 7055
Rosli, O. K. J. 6939, 8590
Rosli, O. K. Jilli 6939, 8590
Rosli A. Wahid 8590
Rosli Hj Jilli 7055, 7307
Roslinah, H. M. 6893
Roslinah, Haji Mohsin 6893
Rosoman, G. 6368
Ross, D. G. 7138
Ross, D. W. 5735, 6451, 8340, 9148
Ross, G. 839
Ross, H. B. 1950
Ross, J. J. 3768
Ross, S. J. 3037
Ross, W. G. 5179
Rossi, M. 2750
Rossi, P. 2194, 3974, 5511, 8227
Rossi, R. E. 9160
Rossi, V. 8585
Rossman, A. Y. 9067
Rosso, P. 2104
Rosso, P. H. 3019
Rosso, R. 7068
Rosson, J. F., Jr. 3503
Rostiwati, T. 1613-1614, 1719, 1809
Rosvall, O. 6182
Rotach, P. 7334
Roth, J. E. 1029
Roth, P. L. 6096
Roth, S. K. 2318, 5711
Rothe, A. 3664
Rothe, G. M. 9856, 9993
Rothmaler, R. 2444
Rothwell, R. L. 8030
Rotival, N. 4261, 9712
Roton, L. M. 655
Rottmann, W. H. 7337
Roubach, R. 9233
Rougé, P. 5563
Rouhier, H. 4464
Rouiller, J. 4488, 4717
Roulet, N. T. 361, 9510
Roulund, H. 567
Rouse, W. R. 3693, 7948
Rousi, M. 2985, 3221
Rousseau, J. V. D. 5585
Roussel, G. 5557
Roussis, V. 8686
Rout, G. R. 115, 1702, 4281, 5091
Rovainen, E. 6212
Roveraro, C. 1700
Rovere, A. E. 6510
Roversi, P. F. 9141
Rowan, D. 4940
Rowe, L. K. 2910, 8375-8376
Rowland, A. P. 5255
Rowland, J. J. 4344
Rowntree, R. 1588
Rowntree, R. A. 3284, 10138, 10141
Roy, G. 3813
Roy, P. S. 9638
Roy, R. D. 9280
Roy, W. K. 1963
Royall, P. D. 3701
Roychoudhury, N. 7433, 7456
Royer, A. 4186
Royle, D. J. 5647
Royo, A. P. 9668
Rozenberg, P. 4203
Rozsnyay, Z. 6844, 9384
Różycki, H. 7388
Ruas, L. M. S. 7140
Rubalcaba, J. J. O. 9668
Rubanovich, A. V. 5484
Rubio Sánchez, A. 9574
Rubio-Torgler, H. 3222
Rubner, H. 5969
Rubow, T. 7789
Rubtsov, V. V. 10040
Rucker, R. R. 2777
Rudakov, Yu. A. 4611
Rudall, P. J. 8901
Rudawska, M. 444, 4003, 7409
Rudd, J. W. M. 3678
Rudd, N. 9552
Rüdinger, M. 5285, 7072
Rudis, V. A. 763, 4074
Rudnicky, T. C. 1510
Rudolph, D. C. 4070, 9209
Rudolph, J. 8015
Rudrappa, S. 4463
Rue, D. 7605
Rueda, R. M. 3046
Ruel, J. C. 8621
Ruffner, C. M. 9951
Rugalema, G. H. 6732
Rugmini, P. 9686
Rugo, L. G. 4172
Ruitenbeek, H. J. 7019
Ruiz Rodríguez, M. E. 7397
Rulangaranga, Z. K. 3905
Rule, L. C. 3258, 8406
Rundel, P. W. 3001, 4554
Runge, C. F. 4463
Runion, G. B. 3171
Runkel, K. H. 1126
Runkle, J. R. 3909
Running, S. W. 1340-1341, 1346, 4084, 5412, 7011, 9361
Runyon, J. 1339, 1342, 4174
Ruoho-Airola, T. 6333
Ruohomäki, K. 2361
Ruokolainen, K. 3940
Ruoss, K. 3649
Ruotsalainen, S. 8210
Rupé, C. 4204, 5840, 10090
Rupprecht, K. L. 56
Rusalenko, A. I. 8714
Rusli, M. 5970
Russell, C. 735
Russell, D. H. 1812
Russell, J. 1083, 2110
Russell, J. H. 4335
Russell, T. H., Jr. 2303
Russell-Smith, J. 3824, 10129
Russell-Smith, J. J. 7272
Rustad, L. E. 299, 3320, 3574, 8827

Ruter, J. M. 1732, 4137
Rüther, E. 2669
Ruthven, D. C., III 3201
Rutishauser, R. 2050
Rutkowska, L. 7171
Rutkowski, B. 2163
Rutter, A. J. 4558
Rutter, M. R. 7737
Ruuskanen, J. 5314
Ruutu, M. 5971
Ruwa, R. K. 7299
Rwangabo, P. C. 6952
Ryan, D. A. J. 1591
Ryan, D. F. 319
Ryan, M. G. 2851, 2992, 4174, 5412, 5958, 8102, 8929
Ryan, P. G. 3837
Ryans, M. 6140
Rybakova, N. A. 4943
Rybin, A. V. 4950
Ryck, M. de 949
Rydahl, P. 7789
Rydval, P. 779
Rye, B. L. 578
Ryel, R. J. 456, 2948, 5405
Rygiewicz, P. T. 1097, 4007
Ryherd, S. 4444
Ryland, G. P. 3670
Rysavy, T. 9781
Rysin, L. P. 1586
Rytter, L. 318, 6189, 7769
Ryu, K. O. 7720-7721
Ryynänen, L. 7726-7727
Ryyppö, A. 3013, 3802
Ryzhova, I. M. 328
Rzeźnik, Z. 837
Saadou, M. 200
Saake, B. 4668
Saarelainen, A. 3767, 3804
Saarenmaa, H. 5022
Saari, E. 966, 6494
Saarinen, T. 1259
Saarsalmi, A. 5063, 5184
Saastamoinen, O. 2483
Saavedra, A. 1880
Sabag, C. 3219
Sabaté, S. 2840, 3752, 7957
Sabatti, M. 4523
Sabiiti, E. N. 5362
Sabin, T. E. 417, 907
Sabol, D. E. 7843
Sabor, J. 1427
Saborí, I. 1496
Saborowski, J. 792, 989, 2751, 4436
Sabrani, M. 4181
Saburi, Y. 4702, 9450
Sacamano, P. L. 6239
Sachot, R. M. 1233
Sachs, D. 2814
Sadashiva, T. S. 1689
Sadiq, M. 1534, 2980
Sadiq, R. A. 5966
Sadourny, R. 9759
Sæbø, A. 6056, 8581
Saenger, P. 3899, 6857
Saenz, D. 4070
Saenz-Romero, C. 566
Safai, P. D. 9760-9761
Safronova, G. P. 4795
Sage, R. B. 2392
Sagl, W. 234
Sagrero-Nieves, L. 424
Sagwal, S. S. 4, 1652, 1655, 2417
Sah, A. K. 1654
Sah, V. K. 1678, 9432
Sahai, K. 482, 2573
Saharjo, B. H. 8415
Sahashi, N. 4853
Sahlén, K. 3382, 6037
Sahoo, Y. 6042
Sahota, T. S. 5756, 5778
Sahu, A. K. 10035
Sahu, F. L. 156
Saifullah, S. M. 3961
Saiki, H. 7658
Saiki, K. 2581
St. Amour, M. 4366
St. Clair, J. B. 2182-2183
St. Louis, V. L. 3678
Saint-Martin, M. 4648
Saint-Paul, U. 9233
Saint-Pierre, C. 978
Saintonge, F. X. 5737
Sainz Ollero, H. 8991
Saito, A. 4468, 5071, 7186
Saito, G. 9633
Saito, H. 9868, 9885
Saito, K. 9572, 9931
Saito, Y. 6886
Saitoh, A. 4040
Saitoh, Y. 7658
Saiz de Omeñaca, J. 5979
Saiz de Omeñaca, J. A. 5979
Saiz de Omeñaca, M. G. 5979
Sajeevukumar, B. 7729
Sakai, A. 9014
Sakai, C. 9452
Sakai, H. 1018, 4369, 6944, 9522
Sakai, K. 418, 1246, 4677, 5395, 5401
Sakai, M. 5193
Sakai, S. 3142, 9821
Sakamoto, Y. 2277
Sakata, I. 1245
Sakata, T. 6361
Sakimoto, M. 8064-8065
Şakıyan, N. 8124
Saksa, T. 4396-4397
Sakuma, T. 5337, 6311-6312
Sakurai, S. 8483, 8624
Sakuratani, Y. 5761, 9168
Sala, A. 1122, 2840, 7957
Salafsky, N. 6733
Salaj, J. 395, 488, 7150, 7739
Salajová, T. 395, 7739
Salam, U. 9955
Salama, R. B. 3596, 4079
Salas, G. 3280
Salas, W. A. 785, 4953
Salas González, R. 4433
Salatino, A. 7489
Salazar, R. 1438, 2577
Salcedo, I. H. 1559, 2922
Saldias, M. 9
Saleem, M. 141, 8620
Saleem, R. 8907
Salema, R. 116
Salerno, A. R. 8568
Saleta Borderas, J. L. 6241
Saliendra, N. Z. 3602, 8805
Salih, S. A. 9397
Salim, R. 3691
Salin, F. 8928
Salinas Rivano, A. 1435
Salis, T. de 4762
Saljoqi, A. R. 4550
Sall, P. N. 3356
Sallé, G. 7414-7415, 8322
Salleh, M. N. 3356
Salleo, S. 3613, 7068
Sallnäs, O. 9605
Salm, C. van der 7978
Salminen, H. 6937
Salminen, R. 7996
Salminen, S. 5027
Salom, S. M. 5736
Salomão, R. de P. 4380
Salomon, E. 2964
Salonen, E. 6494
Salonius, P. 6900
Salt, D. T. 4573
Salzer, P. 8258
Samantaray, S. 4281
Sambandan, K. 3157
Sambath, S. 10041
Samoshkin, E. N. 1269
Sampaio, A. W. 2422
Sampaio, C. A. M. 9829
Sampaio, E. V. S. B. 1559, 2922
Sampaio, M. U. 9829
Sampe, B. 1805
Sample, B. E. 673
Sample, V. A. 6774
Sampson, D. A. 3553, 5944
Sampson, F. B. 476
Sampson, G. R. 4483
Sampson, J. F. 3825
Sampson, R. N. 2478
Samran, S. 8030
Samson, C. 8358
Samson, F. B. 4127
Samuel, Y. K. 73
Samuelson, L. J. 1293, 1965, 4703
Samuelson, T. J. 4311
San, N. van 2331
San José, J. J. 517, 5287
San Miguel, A. 8613
Sanche, T. 6507
Sánchez, A. 1540
Sanchez, J. V. 8305
Sánchez, M. C. 3395
Sánchez, M. J. 996, 1067, 7080
Sánchez, P. A. 4102, 8491, 10095
Sánchez-Bayo, F. 4312
Sanchez-Coronado, M. E. 3549
Sánchez-Garfias, B. 473
Sánchez-Jiménez, F. 5505
Sánchez M., J. 1469
Sánchez-Martinez, G. 5766
Sánchez Palomares, O. 8785
Sánchez Pérez, J. 9288
Sánchez-Pérez, J. M. 3281
Sanchís Duato, E. 7859
Sancho, F. 5247
Sandanam, S. 5115
Sandberg, C. J. 4017, 4860
Sandberg, G. 1877, 7184
Sandbukt, Ø. 6801
Sander, C. 3319
Sander, H. 5904
Sandermann, H., Jr. 3762, 3801, 4566, 8185
Sanders, F. E. 8271
Sanderson, F. 9857
Sanderson, F. R. 8296
Sandhu, S. S. 5710
Sandor, P. 8084
Sandoval, V. 2751
Sands, P. J. 32, 1133
Sands, R. 4627
Sandström, K. 8418
Sandys-Winsch, D. C. 1667, 1694, 1883
Sanesi, G. 4371, 9308
Sanford, R. L. 4492
Sanford, R. L., Jr. 1071, 2922, 5350, 8929
Sang, F. K. 5874
Sanginga, N. 5153, 9724
Sanguineti, G. 6625
Sani, H. 410
Saniga, M. 6909, 10078
Sanjappa, M. 8968
Sankaran, K. V. 2822
Sanker, K. B. 545
Sankey, S. 6689
Sankhla, D. 89, 6605
Sankhla, N. 89, 6605
Sankovskiĭ, A. G. 7792
Sannikov, S. N. 2180
Sano, H. 8889
Sano, Y. 2026, 4664, 8895
Sanoja-Sarabia, S. 6696
Sanquetta, C. R. 4325
Sant, H. R. 7810
Santa Regina, I. 7915, 9699
Santa Regina, I. A. 6291
Santamaría, M. 1408
Santamour, F. S., Jr. 583, 1456, 3188-3189, 5773, 8137
Santana, D. L. Q. 5713
Sante Regina, I. 1824
Santelices, R. 6062
Santerre, A. 4279
Santhakumaran, L. N. 9150
Santi, F. 5521
Santiago Enriquez, M. A. 4629
Santillo, D. J. 9229
Santini, A. 4021, 4508, 5626, 6020, 9106
Santini, L. 7379
Santo, A. V. de 6285, 7908
Santo, T. L. de 3219
Santoro, M. 704
Santos, C. M. 6153
Santos, G. P. 5713
Santos, I. 116
Santos, J. C. 9776
Santos, J. M. 9776
Santos, M. de L. 6878
Santos, M. N. S. 7411
Santos, T. 2387, 4063
Santoso, E. 1448, 1502, 2229, 2280
Sanz, C. 814
Saowakontha, S. 5035
Sapanov, M. K. 4962
Saphir, N. 8330
Sarabandi, K. 3525
Saracino, A. 364, 1739
Sarajärvi, I. 5960
Saranath Singh 8803
Saranpää, P. 2898, 2984
Sardin, T. 5576
Sargent, C. 2723
Sarin, M. 4238, 4463
Sarita Arya 6047
Sarjala, T. 6452
Sarjan Bhagat 79, 3388
Sarkar, A. U. 3532
Sarkar, S. K. 3497
Sarkeala, J. 5960
Sarker, A. G. 6045
Sarker, R. 4456
Sarma, C. R. 1679, 1721
Sarmah, D. 47
Sarmiento, L. A. 8158
Sárospataki, M. 9165
Sarrailh, J. M. 9247
Sarrazin-Delay, C. L. 9770
Sarre, S. 7531
Sartório, R. C. 5713
Sarukhán, J. 293, 6648
Sas Biswas 515, 2021, 7601
Sasa, K. 7046
Sasaki, K. 5046, 9673
Sasaki, S. 1735, 3130, 4895-4896, 6126, 6886
Sasaki, Y. 5071
Sasaya, T. 428, 1238, 1240, 4664
Sasek, T. W. 3657
Sass, U. 2494, 8894
Sassa, T. 1992
Sasser, C. E. 7321
Såstad, S. M. 9990
Sastrawinata, H. A. 1710
Sastre, C. 4741, 7238
Sastre de Jesús, I. 3049
Satabié, B. 5427
Satapathy, P. C. 6098
Sati, J. P. 6687
Satjapradja, O. 1831, 2397
Sato, A. 4485
Sato, H. 1624, 7480
Sato, M. 450, 6650, 7115
Sato, T. 8211, 9390
Sato, Y. 1925
Satoh, F. 7046
Satoh, M. 9844
Satya Vir 5734
Saucier, J. P. 252
Saucier, J. R. 2459, 4587
Saugier, B. 4401
Saunders, M. C. 36
Saunders, R. M. K. 8133
Saur, E. 4261, 9712
Sauter, J. J. 1279, 2987-2988, 3758, 3780, 3786-3787, 6500
Sauter, U. H. 31
Savage, J. E. 7985
Savage, M. 2121, 10094
Savage, M. J. 308
Savage, T. J. 6495
Savé, R. 9718
Saveland, J. M. 2912
Savidge, R. 1275
Savill, P. S. 3306, 3833
Savin, V. A. 4943
Savoie, S. 886
Savolainen, O. 5480, 5498
Savonen, E. M. 5063, 6452
Sawada, H. 9673
Sawada, R. 8095
Sawaguchi, I. 2720, 9606
Sawai, O 6910
Sawatani, M. 6008
Sawidis, T. 7106

Sawyer, J. W. D. 6744
Saxena, A. K. 3106, 3936
Saxena, K. G. 8426
Saxena, N. C. 1549, 4166, 5036
Sayer, J. A. 3356, 6005, 6837, 7599
Sazonova, T. A. 4526, 9751
Scala, A. 2269
Scala, F. 2269
Scalbert, A. 8089-8090
Scaltsoyiannes, A. 2187, 4273-4274
Scarascia Mugnozza, G. 1038, 6701
Scarascia-Mugnozza, G. E. 1606
Scariot, A. 9880
Scatena, F. N. 996, 1067, 1219, 3049, 4148, 7080
Schaaf, C. B. 2754
Schaaf, W. 132, 7761, 7923
Schaal, R. 9614
Schaap, L. 55
Schaap, M. G. 1093
Schaap, T. 9028
Schabenberger, O. 7672, 7676, 8509
Schaberg, P. G. 7196
Schack-Kirchner, H. 5948
Schadauer, K. 7001
Schader, S. 4161
Schädlich, G. 4188
Schaefer, D. 3666
Schaefer, M. 1593, 1915
Schaefer, P. R. 2550, 8562, 9983
Schaefer, R. R. 4070
Schaefer, S. 9329
Schaeffer, C. 2072, 3007, 7393
Schaetzl, R. J. 2923
Schäfer, H. 1139, 2976, 4211, 6343
Schaffner, W. 5076
Schall, P. 5457
Schallau, C. 1846
Schaller, H. 3846, 8078
Scharbach, R. D. 676
Schaub, L. P. 9151
Schauermann, J. 2825
Schedl, W. 5791
Scheidegger, C. 2879, 5220, 5569
Scheiner, O. 5542
Schell, L. D. 9349
Schemenauer, R. S. 8833
Schemske, D. W. 6558
Schenk, C. A. 6844
Schenk, W. 782, 4235
Schenone, G. 1968
Scherer, G. R. 9507
Scherr, S. J. 4166, 10098
Scherrer, H. U. 4438
Scheu, S. 2825, 4502, 5263, 7910
Scheurer, S. 631
Schiavon, G. 5208
Schickhoff, U. 6848
Schier, G. A. 2864, 10004
Schierenbeck, K. A. 7281
Schiess, P. 4977
Schifino-Wittmann, M. T. 8074
Schilizzi, S. 10111
Schill, H. 8866
Schiller, G. 4881, 7947
Schilling, V. E. 6160
Schimansky, C. 2858
Schimel, J. P. 6318
Schimmack, W. 8830
Schindler, B. 1647
Schindler, C. 2075, 2085
Schioppa, E. P. 6750
Schirone, A. 1320
Schirone, B. 1320, 8942, 9582, 9918
Schittenhelm, J. 3769
Schlaegel, B. E. 995
Schlaepfer, R. 6808
Schlag, M. G. 4720, 8115
Schlatter V., J. E. 6134
Schlee, D. 4708, 6479
Schlegel, A. J. 68
Schleppi, P. 2982, 5394, 7958
Schleser, G. H. 323
Schlesinger, W. H. 1878, 3552, 4406
Schlickhoff, U. 5859
Schloss, A. L. 1834
Schlosser, W. E. 5165
Schlüter, H. 9341
Schlüter, U. B. 1113
Schlyter, F. 2348, 5739, 10044
Schmaltz, J. 1552, 9015
Schmid, B. 3884
Schmid-Haas, P. 469
Schmidt, G. 808, 4234
Schmidt, G. H. 2365
Schmidt, J. 5103
Schmidt, K. M. 6698
Schmidt, L. H. 3962
Schmidt, P. 1519, 6938
Schmidt, S. 8807
Schmidt, U. 10079
Schmidt, V. D. B. 5611
Schmidt, V. M. 5803
Schmidt, W. 5994, 9948
Schmidt-Vogt, H. 6109, 8559
Schmidtke, H. 4438
Schmidtling, R. C. 1660, 9877
Schmieden, U. 4723, 7984
Schmincke, K. H. 6159
Schmithüsen, F. 3354, 7589
Schmitt, C. L. 607
Schmitt, H. P. 2566
Schmitt, M. 6132
Schmitt, T. 9007
Schmitt, U. 398, 6414
Schmitt, V. 6503
Schmitz, M. F. 3871, 8407
Schmitz, R. F. 7205-7206
Schmutz, P. 329
Schmutz, T. 5844-5846
Schnarrenberger, C. 5416
Schneck, H. 4230
Schneck, V. 6511
Schneider, D. 7501
Schneider, E. L. 2023
Schneider, H. 3601
Schneider, R. L. 551
Schneider, W. 245
Schneider, W. L. 2576
Schneiderbauer, A. 8185
Schnell, G. D. 4925, 6679
Schnipke, V. M. 4510
Schnitzler, A. 4128
Schober, R. 9593
Schoch, W. 4760
Schoeneberger, M. M. 1158, 9189
Schoereder, J. H. 5729
Schoettle, A. W. 2036, 2992
Scholes, R. J. 4997
Scholl, H. 338
Scholten, G. 5147
Schönfelder, P. 3930
Schönhar, S. 1451, 4859, 8167
Schönherr, J. 3323, 5803
Schooley, H. O. 1318, 9528, 9870
Schoonmaker, P. 717
Schoor, M. M. 5842, 8994
Schopf, R. 8335
Schöpfer, W. 9602
Schopfhauser, W. 8013
Schowalter, T. D. 3177
Schram, P. 1033
Schramek, J. 6237
Schramm, M. 120
Schreader, C. P. 1926
Schreiber, K. F. 6697, 8379
Schreiber, L. 2089, 3323
Schreiber, L. R. 4863
Schreiber, M. C. 1263
Schreiber, R. 9655
Schreiber, U. 8496
Schreiner, E. G. 2098
Schremmer, F. 5770
Schreuder, H. T. 5004, 8505-8506
Schrire, B. D. 8902, 9893
Schröder, J. 1516
Schröder, K. 10148
Schröder, P. 4674, 4705
Schröder, W. H. 7647
Schroeder, H. W. 3284
Schroeder, L. M. 1495, 2383, 7485, 10045
Schroeder, P. 3259, 8427
Schroeder, P. E. 1188, 2795, 3259, 8427, 9734-9735
Schroeder, W. R. 3967
Schroth, G. 7573, 8422, 8425, 8431, 10100
Schrötter, H. 1535, 4231, 6840
Schrupp, D. L. 7549
Schubert, A. 9697
Schuck, H. J. 2
Schueller, J. 6968
Schueller, J. F. 7860
Schuepp, P. H. 8833
Schuette, W. 4871
Schulte, A. 8836
Schulte-Schmale, F. 2669
Schultz, D. J. 5499
Schultz, J. C. 2328, 7446, 7508
Schultz, M. E. 615
Schultz, R. C. 3258, 6078, 8485, 9273
Schultze, U. 9328
Schultze-Kraft, R. 7444
Schulz, H. 6337, 6355
Schulz, S. 2352
Schulz, T. T. 7549
Schulz, U. 7565
Schulze, D. 5976-5977
Schulze, E. D. 3823, 5285, 9721
Schulze, P. C. 4109
Schumann, A. W. 154, 7778, 7786
Schupp, R. 1134
Schurr, F. G. 4199
Schuseil, J. 4668
Schuster, E. G. 4455, 6244
Schuster, W. S. F. 5167
Schüte, G. 9481
Schuthof, P. 1546
Schütt, P. 2
Schütz, J. P. 38, 178, 912, 4412
Schüürmann, G. 4188, 4555-4556, 4708
Schvester, D. 4890
Schwab, F. E. 4927
Schwab, M. 7969
Schwabe, A. 6394
Schwacke, R. 447
Schwager, S. 3287
Schwanecke, W. 4162
Schwartman, T. N. 1169
Schwartz, E. 9385
Schwartz, M. W. 3892, 7200
Schwartzenberg, K. von 3797, 4698
Schwarze, F. 9093
Schwarze, F. W. M. R. 2968
Schweda, P. 291
Schweingruber, F. H. 3292, 6341, 6762, 6765
Schweinle, J. 4252
Schwencke, J. 6624
Schwinn, A. 8915
Schwyzer, A. 2093
Scofield, J. P. 3574
Scortichini, M. 613
Scorza R., F. 4146-4147
Scott, C. A. 2401
Scott, C. T. 1021, 6211, 6219
Scott, D. 2832, 9576
Scott, D. A. 296, 524
Scott, D. W. 5800
Scott, E. S. 8583
Scott, J. M. 9298
Scott, M. L. 3947, 8393
Scott, N. J., Jr. 4921
Scott, P. 9283
Scotti, R. 280
Scriber, J. M. 5712
Scrinzi, G. 6231, 8740
Scriven, L. J. 8143-8144
Scuderi, L. A. 8465
Scurria, R. 9830
Seabra, R. da C. 6892
Seaby, D. A. 3178
Seager, J. 7629
Seakins, P. W. 8499
Searle, H. 8638
Searles, P. S. 6257
Seavers, G. P. 7381
Šebánek, J. 457
Sebínová, J. 3398
Sedell, J. R. 4156
Sedel'nikova, T. S. 8194
Sederoff, R. 5555
Sederoff, R. R. 5506, 8226, 8248
Sedjo, R. A. 3543
Seegar, J. K. D. 6685
Seegmüller, S. 5582
Seely, B. 5304
Seemann, D. 5648
Seemüller, E. 2291
Seeni, S. 5087
Seethalakshmi, K. K. 977
Šeffer, J. 520
Segal, D. S. 551
Segerström, U. 3068, 5509
Segev, M. 8885
Séguin, A. 2196
Segura, A. 3727
Segura, G. 1995
Sehlapelo, B. M. 8084
Seibert, P. 9932
Seidling, W. 8591
Seifert, F. 4679
Seigler, D. S. 4745
Seiler, J. R. 1265, 1293, 2888, 3667, 6073, 9512
Seino, M. 6910
Seith, B. 1285
Sekar, C. 725
Seki, T. 4736
Sekot, W. 263, 6825
Sękowski, B. 1206-1207, 2115
Selander, J. 10043
Selby, J. A. 5029, 8411
Seletković, Z. 4722, 6502
Self, N. M. 5637-5638
Selikhovkin, A. V. 649
Selim, S. 6624
Sellers, C. 440
Sellers, P. 7498
Sellin, A. 1183
Sellstedt, A. 2227
Semczyszak, A. 5618
Semeniuk, V. 6269
Semenova, G. P. 4711
Semerari, P. 280
Semerikov, L. F. 8193, 8202
Semerikov, V. L. 2181, 8193
Semiadi, G. 9226
Semple, B. 7687
Semple, W. S. 7687
Sen, R. 5620
Sen, S. 1688, 2255, 8297
Sen-Sarma, P. K. 6646
Senanayake, R. 3270
Senba, H. 8083
Senda, M. 4286
Sendak, P. E. 1055, 2778
Sendulsky, T. 6519
Sène, E. H. 1588
Senft, J. F. 6360
Sengier, M. 949, 8860
Sengupta, A. 284
Senior, E. 4096
Senn, J. 7427
Sennerby-Forsse, L. 6392
Sennov, S. N. 2652, 8060
Sensarma, P. 191
Seoane-Camba, J. 5380
Sequeira, V. 4374
Sequerra, J. 599
Sequra, A. 879
Serini, G. B. 2334
Serpantié, G. 9265
Serra, G. 2561
Serra, V. 2962
Serrada, R. 8613
Serraf, I. 1696
Serrano, A. L. 1636
Serrano, L. 9063, 9718
Serrano Játiva, M. 8377
Serrato-Valenti, G. 8062
Serre-Bachet, F. 3288
Servadio, P. 7795
Servant, M. 2129, 3067
Servello, F. A. 4069

Sessions, J. 1623
Setälä, H. 4028
Seth, M. K. 6416
Sethi, P. 5398
Setiadi, D. 6051, 6149
Settle, J. J. 3519
Setyabudi, A. 6202
Setzer, B. 1285
Setzer, W. N. 1250
Seufert, G. 4691
Seuleiman, A. M. 6439, 9802
Sévenet, T. 3846, 8078
Severin, M. 1445
Severns, J. C. 8103
Seville-Jones, D. 1028
Sevink, J. 5260, 8783
Sewraj, M. D. 6440
Sexton, J. 4497, 7897
Seydack, A. H. W. 529
Seymour, R. S. 1842, 3490, 5370
Sgardelis, S. P. 6331
Sha, D. C. 4767
Shabel, A. B. 3878
Shachak, M. 8379
Shackleton, C. M. 4253, 4804
Shackleton, S. E. 4804
Shafranovskiĭ, V. A. 4779
Shafroth, P. B. 3947, 6565
Shah, A. J. 9979
Shah, S. A. 2724, 5031
Shahbaz Ahmad 4121
Shahid Yaqoob 9591
Shaikh, M. H. A. 6705
Shain, L. 4873, 9109
Shakin, V. V. 7668
Shambhu Singh 3361, 10107
Shamila Kalia 4042
Shams, S. 3961
Shane, J. B. 7196, 8934
Shankar, U. 2944
Shankara, A. N. 2560
Shanmughavel, P. 9704
Shannon, S. 6754
Shantini Saminathan 9805
Shao, B. Y. 8112
Shao, G. 5457, 8172, 8815
Shao, G. F. 5457
Shao, Y. H. 5688
Shapcott, A. 7380, 8242
Shapkin, O. M. 965, 2667
Sharitz, R. R. 551, 3965, 7063
Sharma, A. 4375
Sharma, A. K. 297
Sharma, B. M. 3274
Sharma, C. K. 2678
Sharma, C. M. 1354, 9638
Sharma, D. 8255
Sharma, D. C. 1798, 3586
Sharma, D. R. 112
Sharma, E. 1410, 1947, 4119, 8432
Sharma, G. D. 1917
Sharma, I. M. 710, 9281
Sharma, I. P. 1088
Sharma, J. 5190
Sharma, J. K. 7402
Sharma, K. 710, 6089, 9281
Sharma, K. K. 1654
Sharma, M. 8982
Sharma, M. L. 3380, 3854
Sharma, N. K. 710, 9281
Sharma, N. P. 9395
Sharma, P. 5082, 9087
Sharma, P. K. 5561
Sharma, R. 2786, 4119, 8432
Sharma, R. A. 726, 5211, 6200, 10119
Sharma, R. C. 3168
Sharma, R. K. 9982
Sharma, R. P. 9806, 9809
Sharma, R. P. R. 2416
Sharma, S. C. 1366, 7940
Sharma, S. D. 302, 2065, 6115
Sharma, S. S. 9982
Sharma, V. K. 8954
Sharman, L. C. 3095
Sharov, A. 2321
Sharp, C. 7203
Sharp, D. J. 3171
Sharpe, G. W. 6777
Sharpe, W. F. 6777
Sharri, M. J. 7730
Sharrow, S. H. 7583
Shashi Kumar 9254, 10092
Shashidhar, H. E. 70
Shashkin, A. V. 7821
Shaukat, S. S. 3961
Shaver, C. L. 2865
Shavnin, S. A. 6335
Shaw, A. J. 5313
Shaw, C. G., III 618, 8121
Shaw, P. 775, 7203
Shaw, P. J. A. 4558-4559, 4947-4948, 8280
Shaw, R. H. 3534
Shaw, R. S. 8084
Shaw, T. M. 8271
Shcheglov, A. I. 6327, 8829, 9408
Shchenina, T. G. 7916
Shearer, B. L. 8320, 9096
Shebalova, N. M. 1962
Shedley, E. 901
Sheffield, R. M. 9351
Sheikh Ali Abod 445
Sheil, D. 1573, 6580
Sheĭngauz, A. S. 7013
Shekhar, C. 8982
Shekhawat, N. S. 3402
Shela, O. 8870
Shelbourne, C. J. A. 3971
Shelbourne, T. 4830
Shelton, H. M. 7168
Shelton, M. G. 3480, 6099, 8823, 9464, 9912
Shen, X. H. 5509
Shen, Y. C. 2403
Shepard, J. P. 7545
Shepherd, A. 3234
Shepherd, G. 6795
Shepherd, R. F. 4047
Sheppard, L. 5317
Sheppard, L. A. 7337
Sheppard, L. J. 2887, 3024, 4563
Sheppard, S. C. 2861
Shepperson, R. 8902
Sherald, J. L. 1456, 2286, 4023, 8311
Sheran, F. J. 897
Sheridan, R. P. 537
Sheriff, D. W. 2697
Sherman, B. 5508
Sherman, R. E. 345, 6347
Sherpa, S. L. 2461
Sheu, B. H. 7997
Sheu, D. D. 8462
Shi, D. F. 1914, 2400
Shi, J. C. 2755
Shi, N. Q. 8584
Shiansky, L. J. 10161
Shibano, S. 4411, 4418
Shibata, E. 7466
Shibata, E. I. 7474
Shibata, H. 5337, 6311-6312
Shibata, M. 1420, 2193, 7211
Shibata, O. 4174
Shibata, S. 8045
Shibuya, M. 1843, 8697, 9586
Shibuya, N. 425
Shida, T. 3737
Shields, K. S. 9192
Shifley, S. R. 4781
Shigapov, Z. Kh. 5495
Shigematsu, A. 8889
Shigematsu, M. 1245
Shigemori, H. 9813
Shikhova, N. S. 7921
Shima, K. 1943
Shimada, K. 8765
Shimano, K. 6252, 8985, 9001
Shimano, R. 9810
Shimazaki, Y. 8653
Shimazu, M. 2377, 7480
Shimizu, A. 8653
Shimizu, H. 6053
Shimizu, O. 6910
Shimizu, T. 4931, 4934
Shimomura, K. 4292
Shimomura, Y. 9263
Shimotohno, K. 6953
Shin, C. H. 8238
Shin, D. I. 4834, 5544
Shin, J. H. 9008
Shin, K. W. 9843
Shin, R. T. 3516, 3520
Shin-Ike, M. S. 2750
Shinde, S. R. 186
Shindler, B. 7701
Shinkaji, N. 667
Shinohara, K. 3004
Shinozaki, K. 1820
Shiomi, S. 4865
Shipley, B. 8819
Shipman, R. D. 4254
Shirahata, M. 3316, 6255
Shiraishi, N. 4419, 9572
Shiraishi, S. 2203, 7364
Shiraishi, T. 418
Shiraki, K. 8688
Shirakikawa, S. 661
Shirataki, Y. 9841
Shirazi, A. M. 7037
Shirley, J. W. 4402
Shiryaeva, G. A. 873
Shishiuchi, M. 4369
Shishkin, A. I. 44
Shitov, A. G. 1407, 7322
Shiva, M. P. 1657
Shivakumar, H. R. 8642
Shivalingaswamy, T. M. 2341
Shiver, B. D. 170, 6174
Shoemaker, C. A. 796
Shoji, T. 4853, 9116
Shokhirev, N. 6351
Shonali Chaturvedi 1217
Shortl, V. K. 8110
Shortle, W. C. 2289, 7656, 8110
Shortt, R. 1083, 8820
Shova Beck 5525, 6601
Shoyama, Y. 5071
Shrestha, K. M. 8490
Shrestha, R. K. 2461, 8490
Shrimpton, G. 4854
Shrivastava, J. L. 2404
Shrivastava, M. B. 2719
Shrive, S. C. 1753
Shtukin, S. S. 5156
Shubina, M. A. 8693
Shugart, H. H. 799, 1039, 1372, 1475, 3116, 8815
Shukla, P. K. 6154, 6593, 6706
Shukla, R. P. 5471
Shukla, V. K. S. 2974
Shukor, N. A. A. 588
Shumway, J. S. 8794
Shure, D. J. 2306
Shurkhal, A. V. 2181, 8193
Shutyaev, A. M. 9043
Shvidenko, A. 2520
Shvidenko, A. Z. 6836
Shyam Lal 3248
Si, L. 7170
Siagian, Y. T. 1686
Sibley, J. L. 7734, 8458
Siccama, T. 996
Siccama, T. G. 319, 1170, 4195, 5295, 7080
Sickley, T. A. 7526
Sicoli, G. 608
Sidders, D. 2641, 8669
Siddhuraju, P. 2061, 6946
Siddiqi, M. Y. 9727-9729
Siddiqi, N. A. 6017, 6108, 6177, 7257, 7776
Siddiqui, A. A. 5525, 6601
Siddiqui, A. D. 10155
Siddiqui, P. A. 199, 8687
Siddiqui, P. J. A. 7192
Siddiqui, S. A. 8687
Sidhu, D. S. 8565
Sidhu, S. S. 7975
Sidibe, K. 9782
Sidiyasa, K. 4163
Sidle, R. C. 9768
Sidor, Č. 2325
Sidorov, V. P. 8829, 9408
Sieber, A. J. 3515
Sieber, O. 719
Sieber, T. N. 2226, 5617, 5631, 8254, 9092
Siebert, S. F. 7803
Siedlewska, A. 9976
Siefermann-Harms, D. 2090
Siegel, W. C. 2531, 6856
Siegenthaler, J. 329
Siegmund, A. 7983
Siemens, D. H. 7214
Siemon, G. R. 7113
Sierra R., E. 1212
Sievänen, R. 228, 4216, 9589
Sievering, H. 3649
Siikamäki, P. 4918
Siipilehto, J. 7785
Siitonen, J. 4027
Siitonen, M. 6823
Siivola, E. 5324
Sijde, J. H. R. van der 61
Sikarwar, R. L. S. 198
Silander, J. A., Jr. 4206, 5181, 7328
Silberg, B. 2669
Silfverberg, K. 898
Silim, S. N. 4310, 6080
Silin, A. E. 571, 5514, 9044
Silivius, K. M. 6514
Siljak-Yakovlev, S. 4840
Silsbee, D. G. 2098, 7107, 10161
Silva, D. da C. P. da 9907
Silva, D. H. S. 8912
Silva, E. 2424
Silva, E. D. da 4085
Silva, J. A. A. da 5728
Silva, J. C. 1890
Silva, J. C. e 567
Silva, J. de 630
Silva, J. N. M. 6180
Silva, M. F. das G. F. da 3742
Silva, M. F. F. da 2767
Silván, F. 3908
Silveira, C. E. 7733
Silveira, T. S. da 870
Silvennoinen, R. 7845
Silver, W. 996
Silver, W. L. 3562, 3634, 7080
Silverthorne, J. 5513
Silvester, W. 2064
Silvester, W. B. 4694
Silvestre, A. J. D. 3746
Silvola, J. 7783, 7862
Simandl, J. 5763
Simard, M. 7160
Simard, S. W. 9516
Simberloff, D. 7447
Simmonds, N. W. 9372
Simola, L. K. 7359
Simon, B. 7296
Simon, D. 1715, 8773
Simón, E. 1277
Simon, J. C. 7436
Simon, J. P. 3983, 5491, 8197, 9986
Simon, K. H. 9321
Simon, V. 1186, 6163
Simón Zarzoso, J. C. 8138
Simoneau, P. 5571
Simonetti, J. A. 5898
Simonin, G. 4511
Simonova, L. I. 1962
Šimonovič, V. 7302, 9742, 9946
Simons, A. J. 5548
Simpkins, W. W. 9273
Simpson, C. J. 2450
Simpson, D. G. 139, 905, 1084
Simpson, F. 2429
Simpson, J. A. 9487
Simpson, J. D. 9042
Simpson, J. R. 7059
Simpson, L. G. 3481
Simpson, P. 4875
Sims, R. A. 253
Simsiri, A. 5050
Sinaga, M. 6039, 6051, 6595
Sinclair, A. R. E. 4927
Sinclair, B. 310, 4512
Sinclair, F. 9325
Sinclair, F. L. 9325, 10103-10104
Sinclair, W. A. 5672, 7408
Sinden, J. A. 1580, 7578
Singer, A. 5257
Singer, F. J. 5826

Singh, A. 1604, 2764, 3804, 7664
Singh, A. K. 203, 2699, 3246, 4313, 4314, 4946, 5020
Singh, B. 131, 2462, 9080
Singh, B. G. 2444
Singh, B. P. 2406, 4903, 5191
Singh, C. B. 2657
Singh, D. 903, 1992
Singh, D. P. 4062, 8620
Singh, D. V. 9974
Singh, G. 2395, 8389
Singh, G. B. 7862
Singh, H. B. 9089
Singh, H. K. 2657
Singh, I. P. 2618
Singh, J. 2006, 3141, 3499, 4138
Singh, J. S. 5303, 8803
Singh, K. 699, 712, 5875, 9249
Singh, K. A. 8096
Singh, K. D. 7622
Singh, K. K. 5895, 6697
Singh, K. P. 2793, 3192
Singh, L. 9244
Singh, M. 2161, 2593
Singh, M. P. 8388
Singh, N. 191, 5916, 9249
Singh, N. B. 1433
Singh, O. 3332, 3596, 5190, 8506
Singh, P. 767, 2463, 7554
Singh, P. K. 508
Singh, R. 796, 3526
Singh, R. B. 4949, 9250
Singh, R. K. 130, 1791
Singh, R. N. 650, 6664
Singh, R. P. 78, 617, 3941, 5402, 9279
Singh, R. R. 1485, 3689
Singh, S. 1084, 3361, 5875, 7269, 10107
Singh, S. B. 130, 1712, 3901
Singh, S. C. 727
Singh, S. K. 508
Singh, S. N. 5916
Singh, S. P. 535, 756, 869, 904, 1651, 1708, 1941, 2887, 3052, 3254, 3618, 3864, 6043, 6540-6541, 8780
Singh, U. 6147
Singh, V. 79, 1678, 2650, 2951, 3368, 3582, 9432
Singh, V. P. 9664
Singhal, R. M. 386, 1902, 2413, 7106, 7905
Sinha, A. C. 2412
Siniscalco, C. 9952, 9449
Sinkevich, S. M. 6810
Sinkkonen, S. 6455, 7989-7990
Sinkorová, J. 8974
Sinn, J. P. 9743
Sinner, H. U. 9655
Sinta, V. M. 4742
Sinukaban, N. 1997
Sioen, G. 6941, 8999
Sipe, T. W. 4600, 7468
Sipo, P. 5450
Siqueira, J. B. G. 9919
Šír, M. 3324
Sirait, M. 2758
Siregar, C. A. 1768, 1931, 2414
Siregar, S. Z. 6064
Sirén, S. 2994
Siri, M. C. 660
Sirois, L. 799, 8882
Sirrenberg, A. 8259
Sisimi, S. M. 4158, 8460
Siso, A. 8316
Sisto, D. 2373
Sitwanto, B. E. 1847-1849
Sivaramakrishna, D. 1997
Sivaramakrishnan, K. 7695
Sivaramakrishnan, V. R. 2340, 9150
Sivasubramaniam, K. 1677, 1682, 2237
Siwecki, R. 1299, 1463
Sjöberg, H. 10007
Sjöberg, K. 10029
Sjöberg, L. 291
Sjödin, K. 1392
Sjökvist, H. 3286
Sjölander, B. 9408
Sjöström, M. 3015
Skaaning, L. 8393
Skeffington, R. A. 3656, 4160, 4274, 7336
Skelly, J. M. 36, 2946, 9410, 7360
Skenderović, I. 4725
Skinner, M. 1477
Skinner, M. F. 3097
Skipwith, C. 6056
Skłodowski, J. 7416
Skoglund, J. 3906
Skole, D. L. 4803
Skousen, J. G. 3948
Skovsgaard, J. P. 5930, 6120, 6214, 6215
Skröder, H. 1514
Skrappa, T. 368, 2107, 8184, 8618, 9978
Skrynnikov, B. M. 560
Skrzypczak, R. 6002
Skrzypczyńska, M. 2004, 7431
Skubisz, J. V. 5569
Skult, T. 3089
Skutecki, R. 8041
Slade, C. J. 7304
Slater, H. H. 3387
Slater, P. J. 4051
Slaughter, G. W. 606, 615, 5005
Slavíková, D. 1602
Slee, A. V. 3856, 3861
Slee, M. U. 2220, 2604
Slessor, K. N. 5705
Slimáková, B. 6487
Sloboda, B. 3578
Slooten, J. R. de 8876
Slota, R. 5410
Slovik, S. 4565, 5315, 7983, 8099
Sluder, E. R. 2188
Sluimer, A. 4951
Slye, R. E. 7113
Smagin, A. V. 205
Smale, M. C. 4782, 4786
Smale, P. J. 5915
Smali, I. 9082
Smalley, E. B. 4010, 5565, 8306, 9130
Smalley, G. W. 1875
Smalridge, P. J. 614, 3879, 6899
Smallwood, K. B. 7671
Smart, C. D. 9100
Smathers, W. M., Jr. 3528
Smeets, K. 5563
Smel'yaneta, V. 7450-7451
Smetanin, P. J. 5107, 5268, 5300, 7484
Smeulders, S. M. 1142, 5312
Smialek, G. 7641
Smidt, S. 335, 2864, 3004, 9750
Smidt, W. J. 9430
Smiley, E. T. 3246
Smiley, J. T. 654
Smindová, I. 9561
Smirnov, A. P. 131, 8060
Smirnov, K. A. 7590
Smit, C. M. 5451
Smit, G. N. 359
Smit, K. T. 8110
Smita Mishra 6446
Smith, A. A. 3207
Smith, A. H. 3085
Smith, A. M. 2939
Smith, A. P. 784, 1800
Smith, B. 3076
Smith, B. D. 666
Smith, C. J. 3470
Smith, C. K. 3195
Smith, C. L. 1390
Smith, C. T. 1135, 4175, 6366
Smith, D. R. 3603
Smith, D. W. 381, 6384
Smith, F. W. 3553, 9750
Smith, G. B. 4823
Smith, H. 7381
Smith, I. W. 4869, 6664
Smith, J. A. 1284, 3416
Smith, J. E. 4096, 5603, 6640
Smith, J. N. M. 9023
Smith, K. T. 795, 2090, 8176
Smith, L. A. 932
Smith, M. A. 9478
Smith, M. K. 4579
Smith, M. L. 2051, 7287
Smith, M. O. 7849
Smith, M. T. 839
Smith, N. J. 1300
Smith, P. A. 1069
Smith, R. 7647
Smith, R. C. G. 7844
Smith, R. D. 6040, 6698
Smith, R. H. 7913
Smith, R. I. 2008, 3042, 6890, 8862
Smith, S. D. 1168, 9018
Smith, S. M. 2939, 3725, 9103
Smith, T. J. III 448, 1050
Smith, T. M. 1572
Smith, V. 3947
Smith, W. K. 3729, 3738
Smith, W. R. 378, 4219
Smith-Ramírez, C. 2930
Smitmand, T. 8472
Smoley, D. R. 9795
Smola, W. T. M. 795
Smolander, A. 3109, 3276, 7953
Smolander, H. 302, 1640, 2095, 4174, 8069
Smook, J. 9346
Smoorenburg, R. P. 4790
Smout, T. C. 7903
Snader, K. M. 2496
Snedaker, S. C. 3899
Snell, C. J. 7779, 7786
Snellgrove, M. J. 5125
Snelling, J. K. 301, 3556
Snelling, R. R. 4061
Snow, G. A. 4024
Snyder, J. 4490
Snyder, K. R. 7995
Snyder, M. A. 410, 5821
Snyder, M. C. 3621
Snyderman, D. 9617
Soares, A. 7651
Soares, P. 6275
Sobrado, M. A. 1264, 3594
Sobrevila, C. 1860
Soda, R. 9440
Söderberg, H. 9458
Söderberg, U. 1027, 9599
Söderström, B. 5583, 6616, 8283
Soekotjo, W. S. 815, 971, 1509
Soemarno, P. 4626
Soenarya, T. 936
Soepadmo, E. 7156
Soemanegara, I. 756, 3197
Soerianegara, I. 577, 951, 973-974, 1468, 1529, 1549, 2115
Soest, P. J. van 977
Soetrisno, U. 1566
Sofronov, M. A. 9769
Sofronova, G. I. 2886, 9761
Sohar, M. 6847
Sokolov, V. 9965
Sokołowski, A. W. 2164
Solanki, K. R. 2161, 2809, 2599
Solanne, R. 5212, 8140
Solar, A. 5546
Solar, M. 5979
Solari, L. 5992
Solberg, B. 1491, 2901, 3149, 6974, 8018
Sole, R. V. 5466
Solé-Sugrañes, L. 1865
Soles, Z. 6629
Solhaug, K. A. 9992
Solheim, H. 6637, 10014
Söllman, D. 5208
Sollins, P. 2614, 5270
Solomon, J. E. 3173, 4037
Solomon, K. H. 5066
Solomy, F. 837
Soltermann, R. 8445
Soltis, D. E. 500
Soltis, P. S. 500
Soman, T. K. 877
Somerma, P. 2299
Somers, G. 8499
Somers, G. L. 376, 4195
Sommerville, A. 4488
Sommer, J. 3346
Sommer, P. 3040
Sommer, R. A. 6097, 6952, 8083
Sondik, L. 519, 7360, 7383, 7946
Son, Y. 3730
Sone, Y. 438
Sonesson, M. 7807
Song, J. H. 6690
Song, T. Y. 8607
Song, X. 7710
Soni, K. K. 8261
Soni, P. 6270
Sonkar, S. D. 8617
Sood, V. K. 786, 1467, 10085
Sood, V. P. 7369
Sorbetti Guerri, F. 2820
Sordo, G. del 1669
Sordan, R. 280
Sorenson, P. C. 769, 8728
Sorensen, J. T. 1698
Sorensen, C. T. 7468
Sorey, M. L. 8074
Sork, V. L. 8400
Sorkun, K. 9024
Sorokina, N. P. 5190
Sorrensen, A. V. 4950
Sorrensen-Patterson, A. 1083
Sosa-Vélez, M. 3236
Sosa-Moss, C. 1240
Soto, B. 384
Soto Ramos, J. M. 241
Souto, B. 8284
Souchon, C. 7564
Soulier, A. 6839
Soulères, G. 931, 7347
Soulier, C. 7874
Sousa, R. 7464
Soussan, J. 1554
Souter, R. A. 395
Souza, D. B. 28, 271, 2624, 9442
South Africa. Institute for Commercial Forestry Research 8490
Southgate, D. 6545
Southon, J. R. 6874
Southon, T. E. 8646
Souto, X. C. 7391, 7815
Souvannavong, O. 3970
Souza, E. M. T. 3929
Sovan Roy 5908
Sova, S. 4647
Soviraki, L. 7163
Sowunmi, M. A. 7216
Spain. Servicio de Protección Contra Agentes Nocivos 7816
Spangenberg, A. 9710
Spanner, M. 1042
Spanos, Y. A. 5663
Spanoudaki, M. 6099
Sparagano, L. 6507
Sparks, T. H. 5091, 6369, 8372
Sparrow, A. D. 3707
Spear, R. N. 5655
Spears, J. 4197
Speed, C. B. 6636
Speight, M. R. 5697, 5707, 5746, 8304
Spek, L. V. 7466
Spellerberg, I. F. 9744
Spellmann, H. 9523, 9526
Spencer, D. J. 6218
Spencer, D. M. 9065
Spencer, J. F. T. 9065
Spencer, R. D. 5212
Spencer, T. 8012, 877
Sperry, J. S. 3602, 4522, 8805
Spidso, T. K. 4656
Spiecker, H. 7413
Spiecker, M. 4837
Spies, T. A. 1353, 2793, 3459, 4032, 4471, 5347, 6123, 9688
Spinelli, A. 1403
Spinelli, R. 3607, 3677, 9486
Spinelli, S. 9436
Spittlehouse, D. L. 3000
Spitzer, K. 1351

Spława-Neyman, S. 4596
Splunder, I. van 5842, 9963
Sprent, J. I. 1446, 6320, 8487
Springuel, I. 3913
Sprugel, D. G. 8930
Špunda, V. 5408
Spurr, E. B. 1507-1508
Squiers, E. R. 7312
Squillace, A. E. 9107
Squire, R. O. 6209
Sraku-Lartey, M. 4993, 5995
Sreekumar, V. 8628
Srimathi, P. 1680
Srinivas, T. 5328
Srinivasaiyer Ramesh 8079
Sritharan, R. 416
Srivastav, A. K. 9254
Srivastav, P. 9389
Srivastav, P. K. 5525, 6601
Srivastava, A. K. 356, 3154, 4531, 5310, 5568
Srivastava, D. K. 112
Srivastava, D. P. 580
Srivastava, J. P. L. 7559, 9243
Srivastava, K. 5316
Srivastava, M. B. 1010
Srivastava, M. M. 1942
Srivastava, P. K. 580
Srivastava, R. 9248
Srivastava, R. C. 6316
Srivastava, R. J. 4811
Srivastava, R. L. 8564
Srivastava, S. C. 2607
Srivastava, S. K. 504
Srivasuki, K. P. 610, 6379
Šrůtek, M. 1817, 8993
St-Amour, M. 5119, 9548-9549
St-Onge, B. A. 8739
Stå, E. G. 8007
Staaf, H. 3569
Stabentheiner, E. 4727
Staccioli, G. 1253
Stace, C. A. 6520
Stacey, G. R. 6272
Stach, J. 305
Stachowiak, P. 4030
Staden, J. van 86, 448, 981, 1716, 2062, 4282, 9476
Stadenberg, I. 1152, 2854, 3803, 8054
Stadt, K. J. 1757
Staehelin, L. A. 454
Staenz, K. 7842
Staff, I. A. 3729
Stafford, S. G. 1607
Stage, A. R. 2733, 7673
Stäger, C. 329
Ståhl, E. 3682, 6182
Ståhl, E. G. 3374
Ståhl, G. 2726, 3504
Ståhl, L. 2493
Staines, B. W. 9576
Stajniak, J. 899
Stål, Ö. 5911
Stallings, J. 5814
Stallings, J. R. 7515
Stamatellos, G. S. 8696
Stamou, G. P. 3945
Štampar, F. 5546
Stanback, M. T. 4190, 4733
Stanbury, W. T. 43
Stand, G. H. 9859
Standardi, A. 862
Stanek, M. T. 5544
Stanfield, D. 6795
Stanford, A. 10073
Stănică, F. 862
Stankovich, M. 6239
Stanosz, G. R. 2254, 2894, 5658
Stansfield, W. F. 233, 9962
Stanton, B. J. 4871
Stape, J. L. 2326
Stapleton, C. 8969, 9887
Stapleton, C. M. A. 8453
Staritsky, I. G. 718
Stark, N. 5447
Starke, R. 9987
Starlinger, F. 9640
Starr, M. 5238, 6333
Starý, P. 7477
Stary, R. 8450
Starzecka, A. 343
Stasi, L. C. di 6153
States, J. S. 8359
Stattin, E. 6087
Stauber, T. 868
Staudt, M. 4691
Stauffer, D. F. 4073
Stauffer, F. 5732
Staxén, I. 2601
Staznik, B. 5139
Steadman, K. J. 8818
Stearman, A. M. 5813
Stearns-Smith, S. C. 9457
Steege, H. 9716
Steege, H. ter 1222, 7274
Steel, B. S. 1647, 7701, 8399
Steele, C. L. 6484
Steen, E. 8048, 8767
Steen, H. K. 4150
Steenackers, M. 611
Steenis, W. van 3590
Štefančík, I. 7145
Stefani, M. 7606
Stefani, M. A. 7606
Stefanini, F. M. 2191, 9106
Stegink-Hindriks, L. 10130
Stehman, S. V. 9350
Stehr, A. M. 8305
Steiguer, J. E. de 1056, 2779
Steijlen, I. 7260, 9913
Steinberg, N. 3632, 3664
Steiner, K. C. 3306, 4254, 7985
Steinke, T. D. 1523, 7301
Steinlin, H. 4101, 4236, 5973
Steinman, J. R. 4224
Steinmeyer, A. 7003
Steinnes, E. 5329, 8019, 9692
Steinsiek, P. M. 6844
Stellingwerf, D. 6216
Stelter, H. 7494
Stemmermann, L. 1398
Stenberg, P. 1610, 2035, 4174, 9662, 9664
Stenberg, P. T. 6977
Stenlid, J. 3311, 8289, 8712, 9102
Stepanov, V. M. 8635
Stepanova, I. P. 1962
Stephan, B. R. 2185
Stephan, R. 4169, 7719
Stephen, F. M. 8338, 8341
Stephenson, N. L. 9314
Stephenson, S. L. 3936
Stepien, V. 3758, 6500
Sterba, H. 7202, 7652, 7754
Sterck, F. J. 4214
Sterjiades, R. 3775
Stermitz, F. R. 9852
Sternberg, L. da S. L. 465, 2836, 3609
Sterner, T. 8475
Stettler, R. F. 2172, 3996, 5532, 5551, 7367
Steudle, E. 5285, 7072
Steudler, P. 326, 2790
Steudler, P. A. 1070, 4503, 8826
Stevens, D. P. 7297
Stevens, J. P. 7297
Stevens, P. A. 353, 360, 5242, 7127, 8020
Stevens, P. J. G. 5107
Stevenson, D. W. 3048
Stewart, D. B. 5406
Stewart, G. H. 3909, 4499
Stewart, G. R. 8807
Stewart, J. D. 3608, 4519, 4680, 5230, 6083, 8931
Stewart, J. L. 1673, 3372
Stewart, L. 744
Stewart, L. G. 1133
Stewart, M. 5353, 6649
Stewart, R. R. 9619
Stewart, S. C. 564
Stewart, W. P. 2428
Sticklen, M. B. 1456, 5635
Stidham, T. M. 4023, 8311
Stiell, W. M. 4247, 4354
Stierle, A. 3011, 3144
Stigter, C. J. 4946, 5874
Stileman, M. R. 3519
Stimm, B. 558, 1307, 9424
Stine, M. 1887, 5494, 8229, 9977
Stirton, C. H. 8904
Stober, F. 2075, 2079
Stock, A. J. 1489
Stock, R. 792
Stock, W. D. 4613, 6319, 9466
Stöcker, G. 8848
Stockey, R. A. 2935, 4646, 5378, 9128
Stocks, B. J. 7275
Stoehr, M. 555
Stoehr, M. U. 4813, 9327
Stoelting, M. 4576
Stohlgren, T. J. 9349
Stojković, M. 4616
Stokes, B. J. 2457, 4579, 6935
Stokes, M. 9313
Stokke, D. D. 2027
Štokrová, J. 2042
Stoll, P. 3884
Stomp, A. M. 5094-5095, 5666
Stone, C. 2297, 3603, 5681, 7422, 9138
Stone, G. N. 2360
Stone, J. K. 8312
Stone, M. 8456
Stone, T. A. 4085
Stoneman, G. L. 1123, 2636, 3441
Stopińska, J. 7404
Storch, I. 6688
Storer, A. J. 5645
Storey, J. B. 9313
Storey, R. 2071
Stott, P. 1385, 7629
Stow, D. 2913
Stow, D. A. 3187
Stowe, K. A. 8810
Stoyenoff, J. L. 645-646, 5733
Strachan, W. M. J. 5343
Strahler, A. H. 1345, 1853, 2754
Strain, B. R. 1881, 2080, 4696, 6432, 6619, 7075
Strand, G. H. 7207
Strand, M. 6496
Strandman, H. 1621
Stratis, J. 7106
Strauss, D. 375, 2001
Strauss, S. H. 563, 7337
Strauss-Debenedetti, S. 3731
Strazzullo, A. 609
Stred'anský, J. 5926
Street, J. E. 1608
Streeter, T. C. 9717
Strehlke, B. 822
Streit, W. 2015, 6447, 6459
Streller, S. 3766, 5414, 6480
Strenge, D. D. 500
Strezhneva, N. A. 854
Stribling, H. L. 4053, 6380
Stricklan, D. 6675
Stringer, J. W. 4300
Stringi, L. 8489
Strobel, G. 3011, 3144
Strobl, S. 148
Strohbach, B. 7104
Strohm, M. 5543
Strohmenger, T. 2356
Strom, B. L. 655
Stromberg, J. C. 309, 1531
Strömvall, A. M. 4564
Strong, A. M. 4059, 6721
Strothbäumer, H. W. 2669
Strothmann, R. O. 4357
Stroup, W. W. 8939
Strouts, R. G. 6
Struik, G. J. 1393
Strullu, D. G. 5571
Struve, D. K. 2588, 5112
Struwe, S. 3575, 8491
Strykowski, W. 2773, 9379
Strzelczyk, E. 7388
Stuanes, A. O. 754, 1125, 5246
Stuart, J. D. 379
Stuart, J. N. 4921
Stubbs, B. J. 6857
Stüber, V. 9627
Stuckey, G. L., Jr. 3528
Stuhrmann, M. 4546, 5130
Stulen, I. 1966, 3645, 3789
Stülten, C. H. 9073
Stür, W. W. 3371
Sturrock, R. 9100
Stutte, G. W. 4978
Stutz, J. C. 4843
Su, D. D. 7373
Su, W. C. 8910
Su, Y. 7697
Suárez, E. 5814
Suárez, L. 5814
Suarez-Cervera, M. 5380
Subba Reddi, C. 9867
Suberkropp, K. 7917
Subhash Ashutosh 2786
Subhash Hardaha 6156
Subhendu Chaudhuri 284
Subiyanto, B. 2480
Subrahmanyam, M. V. R. 8586
Subramanian, K. N. 2448, 3140, 3991
Subramanian, M. 1273
Sucharita Gopal 4444
Suchek, V. I. 49
Sucoff, E. 6299
Sucoff, E. I. 6123
Suda, M. 7533
Suda, S. 9821
Sudachkova, N. E. 4711
Sudarna, N. S. 6406
Sudarsanam, G. 6151, 7806
Sudhakara, K. 7729, 9057
Sudhakara Reddy, M. 4850
Sudhendu Mandal 4650
Sudhir Kochhar 5558
Sudnitsyna, T. N. 4294
Sudripta Das 7732
Suffling, R. 1997
Sugau, J. B. 7230
Sugayama, R. L. 7489
Sugimura, Y. 9938
Sugita, H. 3433, 4139
Sugita, S. 2128
Sugiura, M. 2193
Sugiyama, H. 7529
Sugiyama, K. 1177
Sugiyama, T. 2339
Suhaendi, H. 2204-2205
Suharti, M. 1996, 2280
Sujatha, M. 1679
Sukandi, T. 2414
Sukanten, I. W. 8567
Sukardi, I. 1802
Sukumar, A. 721
Sukumar, B. 721
Sukumar, R. 2102, 10076
Sulayem, M. 4125
Sulkinoja, M. 4731
Sullivan, J. 3493, 6991, 7702
Sullivan, J. E. M. 4522
Sullivan, J. H. 1895, 2806, 7032, 8764
Sullivan, T. P. 1511, 4060
Sulong, I. 8706
Suman Midya 2574
Sumanen, J. 6242
Sumantri, I. 196, 968-969
Sumarhani 1711
Sumarna, Y. 1803
Sumenkova, T. N. 1962
Sümer, S. 5011
Sumiasri, N. 1566
Sumita Jha 7732
Sumitro, A. 6203
Sumner, M. J. 6349
Sumpter, C. 6236
Sun, D. 2637, 8395
Sun, D. P. 10012
Sun, G. Q. 1031, 1039, 1041
Sun, W. Q. 2438, 10156
Sun, X. W. 3267
Sun, Y. R. 6895
Sunaga, Y. 9947
Sunanda, C. 8628
Sundar Pant, S. 9480
Sundaram, A. 1770
Sundaram, K. M. S. 7112, 9187, 9198
Sundararaju, R. 8563
Sundås, A. 5504, 8230

Sundberg, B. 2246, 2937, 3159, 4659, 7184
Sundberg, U. 2517, 4236, 5973
Sundblad, K. 5836
Sundblad, L. G. 5233, 9477
Sunder, S. S. 7511
Sunderlin, W. 7585
Sunderman, N. J. 9189
Sundkvist, H. 3435-3436
Sundriyal, R. C. 1410
Sundström, E. 6112
Sundström, K. R. 7943
Sung, J. H. 8709-8710
Sunil Kumar 9648
Sunil Puri 3361, 3689, 4336, 10107
Sunita Sen 2255, 8297
Sunnucks, P. 2360
Suo, Z. 9879
Suomela, J. 2933, 2959
Supriyanto 1691
Suramihardja, S. 4168
Surendra Varman, K. 10076
Surendran, C. 71, 1662, 1680
Suresh, K. K. 1662
Suresh Babu, K. V. 629
Suresh Chand 2786
Suresh Chandra 6141
Surgeoner, G. A. 637
Suri, S. S. 7162
Surico, G. 8316
Sushil Kumar 1993
Sushilkumar 6646
Susi, A. 9091
Susila, W. W. 6162
Susilo, A. 6524
Suska, J. 6792
Suslova, G. N. 1484
Sussman, R. W. 3083
Suszka, B. 849, 4151, 4267
Suszka, J. 761
Sutherland, C. D. 905
Sutherland, J. R. 5778
Sutherland, P. M. 4560
Sutinen, M. L. 3802
Sutinen, S. 338, 3013
Sutiyono 1800, 1802
Suto, A. 4327
Sutomo, S. 1808
Sutter-Barrot, E. 8558
Sutton, B. C. 5654
Sutton, J. C. 1449-1450, 2256
Sutton, R. F. 1749, 4337
Suyama, Y. 5497, 8225, 9914
Suzuki, K. 2372, 5389, 5774, 6612, 8483, 8850
Suzuki, M. 6126, 6176, 9178, 9536, 9931
Suzuki, T. 1624, 2096
Suzuki, W. 1391, 2203, 3226, 9944
Suzuki, Y. 7108
Sveinbjörnsson, B. 7903
Svensmark, B. 8797
Sverdrup, H. 1905, 3674, 7683, 8510
Svetlov, E. G. 1584
Svihra, P. 2284, 2915
Sviridov, L. T. 405
Swaffield, S. 2539, 8401
Swaine, M. D. 6581
Swaminath, M. H. 1513, 1673
Swaminathan, C. 1662
Swamy, P. M. 133, 2541, 6485, 6896, 8821
Swan, S. 8477
Swank, W. T. 1090, 2506, 3121, 3593, 7660, 8182, 8756
Swanson, F. J. 4133, 6290
Swart, J. S. 359
Swart, P. 3778
Swart, W. J. 603, 7038, 7403
Swartz, P. 9835
Sweda, T. 6761
Sweden, Marcus Wallenberg Foundation 3308
Sweden, Sveriges Skogsvårdsförbund 2443
Swedjemark, G. 9102
Sweers, I. L. 2245
Sweet, G. B. 9430
Sweetapple, P. J. 298
Swift, J. J. 4462
Swift, K. I. 887
Swift, L. W., Jr. 2466
Swift, M. J. 8491
Swift, R. S. 8679
Swihart, R. K. 4915, 4919
Swindle, K. A. 7522
Swistock, B. R. 2903
Switsur, V. R. 9853
Switzer, G. L. 8823, 9464
Swoboda, I. 5542
Sword, M. A. 4015
Sy, M. 5137-5138
Syargeĭchyk, A. A. 6352
Syargeĭchyk, S. A. 6352
Sydow, F. von 4041, 9989
Syed Ismail 8586
Sykes, M. T. 3110
Sylla, C. M. 8520
Sylla, K. 8520
Sylvander, R. 3518
Sylvén, E. 7496
Sylvester, T. 5006
Sylvestre, G. 5642
Sylvia, D. M. 5585
Syme, A. J. 7197
Syrén, P. 1859
Syrett, P. 8647
Sysygina, T. I. 5332
Sytsma, K. J. 5541
Szabo, T. 9636
Szabolcs, I. 9324
Szerszenowicz, A. 4049
Sziklai, O. 4172
Szikszai, T. 6820
Szmidt, A. 2376
Szmidt, A. E. 5498, 8221, 9048
Szoszkiewicz, J. 9010
Szott, L. T. 3266
Sztejnberg, A. 6629
Szwagrzyk, J. 3108
Szweykowski, J. 9975
Szymański, B. 1625
Szymanski, S. 6107
Szymura, L. 4917
Tabacchi, G. 214, 8694, 9587
Tabashnik, B. E. 8354
Tabberer, T. A. 4703, 8852
Tabel, U. 2567, 9987
Tacconi, L. 7858
Tachibana, S. 3738, 5391
Tachida, H. 6603
Tacio, H. D. 1013
Tackaberry, R. 1417, 6547
Tacon, F. le 3312, 3567, 3819, 4008, 5595
Tada, Y. 5515
Tadaki, Y. 8889
Tadera, K. 8095
Tadros, M. H. 6481
Taffin, G. de 3408
Tagu, D. 5570
Taguchi, H. 5497
Tahvanainen, J. 3221, 5768, 6317, 6678, 7472
Taillie, C. 9580
Taipale, H. T. 2985
Taira, H. 4326, 4729, 4831
Tait, D. E. 4392
Tajima, M. 560, 4591, 6592, 7341, 7344
Tak, K. 2592, 5082
Tak, W. S. 8206
Takabe, K. 4278
Takahara, H. 9914
Takahashi, C. 565
Takahashi, F. 4888, 9572
Takahashi, I. 4900
Takahashi, K. 2168
Takahashi, M. 2202, 4339, 7045, 7055
Takahashi, T. 7883
Takahashi, Y. 3737, 5046, 7217
Takai, T. 1896
Takala, K. 7996
Takaoka, S. 8990
Takashima, Y. 7616
Takatsuki, S. 4054
Takayama, H. 9821
Takeda, H. 6282, 8064, 8799
Takeda, S. 6761
Takeda, T. 9834
Takeda, Y. 4187
Takei, H. 2260
Takei, T. 6450
Takeshita, K. 5839
Taketsune, A. 4888
Takeuchi, K. 2680, 6847
Takikawa, Y. 2287
Takimoto, Y. 7712
Tako, M. 7175
Talanov, A. V. 3796
Talavera, S. 489, 3841
Talbert, C. 1888
Tallis, J. H. 4763
Talma, S. 2832
Tam, P. C. F. 2247
Tamai, K. 3600, 4491
Tamaki, Y. 7175
Tambe, T. B. 6726
Tamilselvan, N. 1682, 2237
Tamm, C. O. 3580, 7954
Tammaru, T. 9153
Tamminen, P. 5238
Tamrakar, P. R. 6908
Tamura, N. 3008
Tan, G. C. H. 6467
Tan, H. T. W. 1230, 3873, 6551
Tan, P. S. 9825
Tan, W. 5477, 7941, 8111
Tan, W. X. 5477
Tanabe-Higuchi, H. 4631
Tanaka, H. 6221, 9925
Tanaka, N. 9822
Tanaka, R. 8083
Tanaka, S. 9145
Tanaka, T. 4187, 6462, 8690, 9263, 9810, 9832, 9841
Tanaka, Y. 2231, 6311-6312
Tandeau de Marsac, G. 8720
Tandon, S. 482
Tandon, V. N. 1798
Tandre, K. 5504, 5507
Taneda, K. 3744
Tang, M. 7391
Tang, S. 5963, 9538
Tang, S. Z. 5963
Tang, Shou Zheng 9538
Tang, Y. 2052
Tang, Y. H. 9844
Tang, Y. P. 2253
Tange, T. 4895, 6126, 9536
Tangtham, N. 358
Tanguy, M. 1208, 7610
Tani, A. 1772, 8571
Tani, G. 6330
Taniguchi, Y. 6008
Tanimoto, T. 3226, 6104, 9019
Tanizaki, K. F. 1092
Tanji, K. K. 5870-5872
Tanner, E. V. J. 1891, 4793
Tanner, M. 5166
Tanner, R. L. 3740
Tanouchi, H. 6939, 8178
Tansey, J. B. 4074
Tansini, R. 8551
Tanton, M. T. 10063
Tao, K. L. 9029
Tao, Q. 10106
Taper, M. L. 2362
Taplin, R. 8141
Tapola, H. 3359
Tappe, P. A. 7304
Tappeiner, J. C., II 1178, 4348, 4350, 5452
Tapper, N. 373
Tapper, N. J. 1999
Tapper, P. G. 1397
Tarasiuk, S. 6918
Tarasov, P. E. 3891
Tarawali, S. A. 1665
Tarazona, T. 7915
Tardif, J. 3834
Target, A. 1160
Targonskiĭ, P. N. 481
Tarifa, R. 7568
Tarjan, D. 329
Tarko, A. M. 7993
Tarp, P. 9623
Tarrant, R. F. 6784
Tárrega, R. 1384, 8433
Tartakovskaya, T. M. 9769
Tarvainen, O. 6295
Tasaka, T. 6944
Tashiro, N. 7186
Tashiro, T. 3166
Tassin, J. 9674
Tatarinov, F. A. 7792
Tate, K. 4040
Tatman, K. M. 5786, 7498
Tatoni, T. 3959, 9950
Tatsuhara, S. 1836, 3479, 6176, 6195, 9931
Tatsuki, S. 9144
Tatsumoto, H. 7126
Tattar, T. A. 10022
Tauro, P. 7644
Tausch, R. J. 4379
Tausz, M. 4727
Tavakol, M. H. 7904-7905
Tawara, J. N. 9852
Tayler, R. S. 3257, 5060
Taylor, C. A., Jr. 7510
Taylor, C. H. 8376
Taylor, C. M. 1892, 7239, 8484
Taylor, D. A. 774
Taylor, D. W. 5052, 6729
Taylor, E. L. 8072
Taylor, G. 2854, 8755
Taylor, G. E., Jr. 2865
Taylor, J. M. 7117
Taylor, J. S. 6671
Taylor, J. W. 4045
Taylor, P. D. 4067
Taylor, P. J. 9717
Taylor, R. J. 501, 6692, 7532, 10028
Taylor, S. W. 2002
Taylor, T. N. 8072
Tazaki, K. 2215
Tazaki, M. 7341
Tazik, D. J. 4925
Tchamie, T. T. K. 4125
Tchanou, Z. 4594
Tchebakova, N. M. 3938
Tecklin, J. 1720
Teeri, J. A. 3548, 5228, 6433, 6798, 7191
Teerling, C. R. 7442
Teeter, L. 3493
Tegli, S. 2269, 9103
Teichman, I. von 3719-3720, 3848
Teillet, P. M. 7842
Teissier du Cros, E. T. 836
Tejwani, K. G. 3263
Tekle-Haimanot, A. 1668
Teklehaimanot, Z. 8390, 10101
Telenius, B. 6978
Teleshek, Yu. K. 938
Tellería, J. L. 2387, 4063
Tellier, R. 7387
Tellini, A. 26
Temerit, A. 8212
Temmerman, L. O. de 7085
Temple, P. J. 1975, 1977, 4553, 8105
Templeton, C. W. G. 9338
Temu, A. B. 5998, 9267
Tenbergen, B. 6697
Teng, T. E. 9803
Teng, Y. 2619, 5111
Tenhunen, J. D. 1122, 2840, 3793
Tenow, O. 5714
Teo, L. E. 3846
Teodorescu, T. I. 917, 9459
Teplyakov, V. K. 5999
Ter-Mikaelian, M. 1819
Ter-Mikaelian, M. T. 9363
Ter Steege, H. 1222, 7274
Ter Welle, B. J. H. 8069
Terabayashi, S. 427
Terada, T. 4702, 9450
Teramoto, M. 7529
Teramura, A. H. 2806, 6122, 8764
Teranishi, H. 4729
Terasaka, O. 2108
Terashima, N. 3714, 3760
Terauchi, K. 8461
Terauchi, R. 6585

Terazawa, K. 6361, 7213
Terborgh, J. W. 8441
Terent'ev, O. A. 44
Terlinden, M. 6249, 8749
Termorshuizen, A. J. 5627
Terradas, J. 1937, 3793, 3865, 8753
Terrasson, D. 3966
Terrazas, T. 8057
Terreaux, J. P. 7020, 9253, 9645
Tesař, M. 3324
Tesař, V. 45
Tesch, S. D. 152, 3490
Teskey, R. O. 1272, 3331, 4695, 7024, 7026, 8752
Tessier, L. 3288, 4989
Teulières, C. 1893, 9063
Tew, D. T. 2469
Tewari, D. N. 751, 1656, 2453-2454, 4135, 5044, 5224, 6771-6772, 6775, 8474
Tewari, V. P. 9648
Teylingen, M. van 612
Thakarar, N. K. 314
Thakur, D. R. 1629
Thakur, G. C. 7269
Thakur, I. K. 789
Thakur, I. S. 1243
Thakur, M. L. 671
Thakur, R. D. 1837
Thamm, F. 7881
Thampan, P. K. 3303
Thangavelu, K. 580, 650, 5525, 6601, 6668
Thapa, B. 10103-10104
Thapa, F. 9480
Thapa, G. B. 6011, 8413
Thapa, R. 5779
Thapliyal, P. 83
Thatcher, L. P. 9270
Theisen, A. F. 3658
Theisen, P. 1667
Theron, G. K. 3206, 8391
Theron, J. M. 7073
Theron, K. I. 3778
Thetford, R. D. 2138
Thevathasan, N. V. 9277
Thiagarajan, M. 2605
Thibault, D. H. 2861
Thibaut, B. 4584, 4635
Thiébaut, B. 581, 4638, 4730, 5519
Thiec, D. le 4473, 5325
Thiele, K. 2117
Thiele, R. 4101, 6849, 7598, 9391
Thielges, B. A. 4873
Thies, W. G. 4299, 6639-6640
Thiessen, K. M. 8844
Thimmapuram, J. 4841
Thimonier, A. 3090
Thiollay, J. M. 7577
Thoen, D. 2236
Thoeny, W. T. 653
Thoma, S. 9778
Thomas, A. 5994
Thomas, C. E. 6165
Thomas, C. R. 7138
Thomas, D. R. 5139, 6644
Thomas, E. M. 3552
Thomas, G. 3282
Thomas, J. W. 4423
Thomas, P. A. 1198
Thomas, R. B. 1881, 4696, 6619
Thomas, R. C. 2612
Thomas, R. E., Jr. 822
Thomas, S. C. 8127
Thomas, T. B. 8825
Thomas, W. P. 679
Thomas, W. W. 9594
Thomasson, J. A. 9643
Thomasson, M. 8998
Thompson, B. D. 5595
Thompson, C. F. 905
Thompson, C. W. 9552
Thompson, D. G. 5139
Thompson, F. B. 8096
Thompson, H. 2526
Thompson, I. D. 3204-3205, 4427
Thompson, J. 296, 524
Thompson, J. R. 6078
Thompson, J. W. 9512
Thompson, K. 3831
Thompson, L. C. 3173
Thompson, M. D. 262
Thompson, M. L. 9273
Thompson, P. N. 8957
Thompson, S. J. 8400
Thompson, S. L. 4768
Thompson, W. A. 4457, 9368
Thoms, C. A. 2847
Thomsen, K. 3078, 3313
Thomson, A. 2882
Thomson, B. D. 5609
Thomson, G. 5610
Thomson, J. T. 4463
Thomson, L. A. J. 3369
Thomson, T. A. 1054
Thomson, W. W. 2071, 6424
Thorburn, P. J. 2837, 3322, 3616, 8809
Thöringer, C. 6479
Thorn, A. J. 7664
Thornton, F. C. 2891, 3667
Thornton, I. W. B. 3037
Thornton, K. W. 6264
Thoroe, C. 4252
Thorpe, K. W. 5725, 5786, 5799, 7498
Thorpe, T. A. 1701, 4291, 5066, 6789, 7747
Thorpe, W. 3257, 5060
Thorwest, A. 2512
Thrower, J. S. 230, 8702
Thulin, M. 758
Thuneberg, P. 8843
Thurber, D. K. 3179
Thuresson, T. 5216
Tian, G. 5262
Tian, L. 4767
Tiarks, A. E. 4024
Tibbits, W. N. 4182, 5526
Tice, K. R. 7918
Tie, D. Y. 6441
Tiedemann, A. R. 6372
Tiee, J. 1028
Tieh, F. 6988
Tierney, J. 4576
Tiessen, H. 5269, 5357
Tieszen, L. L. 9693
Tietema, A. 1093, 5305, 5320-5321, 5323, 7892
Tiffany, L. H. 8251
Tigerstedt, P. M. A. 9980
Tikhomirov, F. A. 6327, 8829, 9408
Tikhonov, A. S. 5462
Tikhova, M. A. 8059
Tiki-Manga, T. 6734
Tikkanen, E. 6859
Tiktak, A. 3568
Tilander, Y. 10117
Tillberg, E. 5409
Tillequin, F. 8911
Tillesse, M. de 9691
Tillman-Sutela, E. 6400, 8896
Tilman, D. 5472
Tilyard, P. 7724
Timbal, J. 4153, 4520
Timberlake, J. 6861, 7002, 7634-7635, 7846
Timer'yanov, A. Sh. 5495
Timmer, V. R. 2619, 4305, 5111, 9850
Timmins, S. P. 8736
Timmis, R. 1888, 4653
Tinaut, A. 9130
Tindall, J. A. 3676
Ting, I. P. 4700
Ting, J. T. L. 440
Tinker, D. B. 1200
Tinker, I. 3276
Tinker, P. B. 8491
Tinoco-Ojanguren, C. 6259
Tintemann, H. 4708, 6479
Tippett, J. T. 8320, 9096
Tipton, J. L. 4509, 5371, 7059
Tirel, C. 9888
Tirelli, D. 1037
Tischner, R. 7995
Tisdale, R. A. 7205-7206
Tissescu, A. 7596
Tissot, C. 3293
Tissue, D. T. 7946
Tita, M. 337
Titova, N. A. 5853
Titovšek, J. 3190, 5680
Titus, B. D. 3512, 7838
Titus, S. J. 1838
Tivari, R. K. 605
Tiwari, A. K. 2761, 5471
Tiwari, B. N. 2461, 6883
Tiwari, G. P. 6115
Tiwari, S. 2875
Tiwari, S. K. 869, 6044
Tiwari, V. J. 202
Tjepkema, J. D. 8269
Tjernberg, M. 1521
Tjoelker, M. G. 2492, 9752
Toan, T. le 3516, 3520
Tobi, D. R. 9677
Tobita, H. 7772
Tobler, L. 2982, 5394, 7958
Toda, H. 4487
Toda, T. 560, 6592
Todaria, N. P. 81, 113, 1736
Todd, A. W. 4005
Todd-Bockarie, A. H. 84
Toder, S. 3769
Toetz, D. 9235
Togashi, I. 665
Togashi, K. 4888
Tognetti, R. 1929, 3607, 7070, 8579
Toit, R. F. du 6549
Tokár, F. 7212
Tokumasu, S. 3143
Tokuoka, M. 9245
Toky, O. P. 1661, 2037, 3582, 5561, 9050, 9414
Tol, G. J. 3080
Toland, D. E. 3592
Toledo, C. S. 5000
Tolhurst, K. G. 2508, 6376
Tollefson, T. 8645
Tollier, M. T. 5375
Tolliver, K. S. 7314
Tolosana Esteban, E. 788
Tolvanen, A. 966, 6494, 8039
Tomaiuolo, M. 280, 945
Tomaneng, A. A. 1692, 1910
Tomar, O. S. 8387
Tomar, R. 9050
Tomaru, N. 565, 8213, 8225
Tomás-Barberán, F. A. 1232
Tomás-Lorente, F. 1232
Tomašević, A. 4602
Tomasi, M. 4523
Tomback, D. F. 3708, 9105
Tomboc, C. C. 920, 2477
Tomé, J. 3687
Tomé, J. A. 4752
Tomé, M. 4752, 6215
Tomer, R. P. S. 9064
Tomiczek, C. 8117
Tomimura, Y. 6659
Tomita, A. 6311-6312
Tomita, Y. 7175
Tomizawa, H. 4766
Tomkins, B. 2978
Tomkins, I. B. 6119
Tomlik, A. 1325
Tomlin, E. S. 1490
Tomlinson, H. 10101
Tomlinson, M. 3245
Tomlinson, P. B. 4645
Tomos, D. 7942
Tomppo, E. 7968
Tompsett, P. B. 9431
Tongway, D. J. 9002
Tonkin, C. M. 1695
Tonneijck, A. 1971
Tonnessen, K. A. 2865
Tonon, G. 5512, 6031
Tonye, J. 2542, 6734
Toon, P. G. 75
Toor, G. S. 883
Topa, M. A. 2846
Topolska, G. 1337
Topper, E. 1546
Torelli, N. 1214, 4240, 4626, 9862
Torgersen, T. R. 5800
Toribio, M. 8588
Torpy, C. 3955
Torregiani, E. 9800
Torrekens, S. 5563
Torres, E. 7775
Torres, J. 950, 1556, 2393
Torres, J. A. 2819
Torres, L. 1186
Torres, P. 4844, 8285, 9083
Torres, S. 4307
Torres Montalbetti, R. 2597
Torrini, L. 280
Tosa, H. 9810
Tosh, J. E. 4096
Tosh, K. J. 9042
Tosi, V. 1852, 8694
Totey, N. G. 1945, 4972
Tóth, K. 6054
Toti, L. 5664
Totsuka, T. 3669, 7048, 9747
Totté, J. 6952
Toumi, L. 8244
Touré, A. S. 3922
Tousignant, S. 5275
Toutain, F. 1918
Touyama, Y. 9714
Touzet, G. 2518, 8718
Towers, G. H. N. 5391
Townend, J. 8106
Townsend, A. M. 4255, 10150
Townsend, E. C. 3584
Townsend, I. K. 1301
Townsend, J. G. 7630
Townshend, J. R. G. 9630
Toxopeus, A. G. 7684
Toyama, S. 8192
Toyoda, T. 9019
Toyokawa, K. 962, 2665
Trabaud, L. 1282, 2921, 4612, 8947
Tracy, J. 2526
Trainotii, A. 9838
Trampler, T. 7285
Tran, M. 7655
Tran Van Sung 8085
Tranvan, H. 2591
Traoré, A. 10101
Trapasso, L. M. 532
Trappe, J. 3156
Trappe, J. M. 2243, 4004-4005, 5567, 5602
Travan, J. 8323
Traveset, A. 4735
Travis, K. A. 7579
Travnikova, G. I. 232
Treblanche, A. P. S. 9409
Trébuil, G. 7852
Trefz-Malcher, G. 9696
Trematerra, P. 2334
Tremblay, C. 6417
Tremblay, F. M. 2196, 7746, 9434
Tremolada, P. 1978
Trémolières, M. 3281, 3640
Trencia, J. 8899
Trenin, V. V. 5422
Trenti, A. 7992
Treseder, K. K. 9134
Tress, J. A. 309, 1531
Treter, U. 9949
Tretiach, M. 8169
Treue, T. 2723
Treutter, D. 433
Trevino, B. A. 2491
Trevisan, G. 1649
Trevitt, A. C. F. 6004
Triboulet, C. 4952
Triboulot, J. M. 3505
Triboulot, M. B. 7942
Tricco, P. 80
Trichet, P. 4261, 9712
Triggs, B. E. 3194
Trigiano, R. N. 2279, 5085
Triguero, N. 1500
Trinidad-Pizarro, R. 2789
Tripathi, D. 882
Tripathi, N. D. 4268

Tripathi, S. K. 2701
Tripepi, R. 5088
Tripepi, R. R. 7764
Tripp-Knowles, P. 4764
Trivett, M. L. 3889
Triviño, T. 879
Triwilaida 1908
Trobaugh, J. 8645
Trockenbrodt, M. 4624, 6410
Troeng, E. 9506
Trombetta, N. M. 2273, 8119
Trossat, C. 3764
Trost, M. 3762
Trotter, D. 4854
Trottier, C. 1156
Trowbridge, R. 8880
Troy, J. P. 8717
Truan, R. 7610
Truax, B. 5135, 5289
Truche, M. 10089
Trumbore, S. 4380
Trumbore, S. E. 4085
Truppi, L. 2507
Tsai, C. J. 5560
Tsaktsira, M. 2187
Tsang, E. W. T. 3975
Tsao, T. H. 485
Tsatsa, M. 6980
Tschaplinski, T. J. 1119, 5406, 7195
Tschen, J. 3158
Tsel'niker, Yu. L. 3297, 3788
Tshuma, J. 2308
Tsoulpha, P. 4273
Tsuboyama, Y. 4931
Tsuburaya, H. 5032
Tsuchiya, A. 3900
Tsuchiya, D. 2377, 7480
Tsudzuki, J. 2193
Tsukada, M. 9633
Tsumura, Y. 565, 2202, 5497, 8225, 9037
Tsutsumi, J. 4582, 9795
Tsutsumi, Y. 418, 1246, 4677, 5395, 5401
Tsuyuki, G. 9633
Tsuyuzaki, S. 5463, 8652
Tsvelev, N. N. 8979
Tsvetkov, V. 9118
Tsvetkov, V. F. 4237
Tsyplakov, V. V. 934
Tuani, G. K. 6444
Tucker, K. C. 9359
Tucker, R. P. 4150
Tucker, S. C. 8488, 8975-8976
Tudor, T. A. 862
Tufts, R. A. 6855
Tugushi, K. L. 2546
Tuite, P. 3114
Tuley, G. 5893
Tuomainen, A. 23
Tuomela, K. 6022, 7560, 7781
Tuomi, J. 2994, 4731
Tuominen, H. 1209, 4659, 7184
Tuomisto, H. 2765, 3940
Tuquet, C. 8322
Turchin, P. 653
Turchin, T. Ya. 4328
Turckheim, B. de 8723
Turcq, B. 3067
Turgeon, J. J. 3180, 5677, 6667
Türk, S. 2858
Türk, W. 9003
Turkinevich, O. I. 10055
Turkington, R. 9227, 9514
Turlan, T. 7621
Turland, J. 4597
Turnau, K. 7392
Turnbull, C. R. A. 1717, 3463, 6190
Turnbull, J. W. 3369
Turnbull, M. H. 3554, 8807
Turner, B. L., II 4953
Turner, D. 2918
Turner, D. P. 7071
Turner, D. R. 4492, 6287
Turner, I. M. 1230, 3051, 3873, 4543, 6427, 6454, 6467, 6551
Turner, J. 1708, 5105, 8716
Turner, M. G. 1200
Turner, N. C. 1123
Turner, R. L. 6378
Turner, S. 5206
Turnewitsch, W. 8607
Turok, J. 8492, 9987
Turpault, M. P. 8943
Turski, M. 994
Turundaevskaya, T. M. 10019
Turunen, M. 7098
Turvey, N. D. 2949, 3867, 5117, 5268
Tuskan, G. A. 1119, 2282
Tveite, B. 754
Tverdokhleb, P. T. 2661
Tweed, D. R. 4889
Tweedie, T. 10064
Twell, D. 7355-7356
Twining, C. E. 5968
Tybirk, K. 3842, 3962
Tyerman, S. D. 3616
Tyler, G. 7885
Tylkowski, T. 845, 850-851, 857, 6875
Tyree, M. T. 310, 1118, 1477, 2843, 4512, 4621, 5373, 6298, 7060, 9860
Tyrrell, L. E. 3587, 4799
Tyrväinen, L. 2483
Tyszko, P. B. 2888
Tzedakis, P. C. 8989
Tzschupke, W. 1049
Ubukata, M. 4816
Uçar, G. 8913
Uchida, E. 4187
Uchida, K. 565, 2202
Uchida, S. 8567
Uchimura, Y. 5074
Udagama-Randeniya, P. 1275
Udaiyan, K. 3152
Udisti, R. 1249
Ueckert, D. N. 6556
Ueda, M. 4507
Uehara, T. 1260, 2977, 4671, 4715
Uehara, Y. 5261
Uemura, S. 1349
Ueno, Y. 1851
Uhl, C. 1174, 6569, 7568
Uhlig, P. 253
Uibrig, H. 4641
Uitto, J. I. 7632
Ujiie, M. 2032, 7118
UK, Botanical Society of Scotland 5937
UK, Countryside Commission 6748
UK, Department of the Environment 267
UK, Forestry Trust for Conservation and Education 8449
UK, Her Majesty's Government 267
UK, House of Commons, Welsh Affairs Committee 2516
UK, International Institute for Environment and Development, Forestry and Land Use Monitoring Programme 8719
UK, Scottish Office Environment Department 8522
UK, World Conservation Monitoring Centre 8719
Ukpong, I. E. 7293, 8022
Ulaby, F. T. 3525, 7012
Ulbricht, R. 4164
Ulery, A. L. 5360
Ullrich, C. 1982
Ulrich, B. 1593, 9695
Ulrich, E. 1160, 3290, 6994
Um, T. W. 9709
Uma Shankar 2944
Uma Singh 6147
Umaharan, P. 5115
Umeda, A. 2931
Umemura, T. 3715
Umlauf, G. 5334, 6342
Umrani, N. K. 6726, 7582
Underdown, M. G. 6660
Underhill, E. W. 5705
Underwood, M. 724
Ung, C. H. 215
Uniyal, B. P. 5439
Uniyal, D. P. 97
Uniyal, R. C. 9433
Unni, N. V. M. 3513
Unruh, J. D. 1415
Unsworth, M. H. 2881
Untawale, A. G. 6996
Unterpertinger, E. 1886
Ununger, J. 8040
Uotila, A. 3455
Uotila, I. 3221
Uotilla, A. 1461
Upfold, S. 2062
Upton, C. 2774
Urban, A. J. 9175
Urban, D. L. 3116, 3542, 8365
Urban, S. T. 3484
Urbančič, M. 2683, 2695, 5126
Urbasch, I. 9111, 9113
Uremovic, A. 4668
Ureña L., H. 1731
Uri, N. D. 2780
Uriarte, N. S. 9563
Uriarte G. de C., A. 955
Urmila Jamwal 1669, 2557
Urrego, B. 5355
Urueña, H. 1705
Urueña L., H. 1685, 1705, 2200
USA, Southern Forest Tree Improvement Committee 9326
USA, USDA Forest Service 2532
USA, World Forest Institute 8599, 9483
Usha Pandey 6328
Uslar, P. 3839
Usol'tsev, V. A. 6408
Uspenskaya, L. N. 4306
Ustin, S. L. 4450
Usui, M. 6008, 8673
Utkin, A. I. 3297, 4544
Utkina, I. A. 10040
Utschick, H. 4964, 6749
Utschig, H. 1007, 9424
Uttamavatin, P. 5035
Utzerrum, R. C. B. 686
Uzhegova, I. A. 1962
Uzma Salam 9955
Vaario, L. M. 9448
Vacas de Carvalho, A. 1797
Vadas, J. 2364
Vadez, V. 6313
Vaganov, E. A. 7821
Vaillancourt, R. E. 8245
Vairelles, D. 5595
Väisänen, H. 1621
Väisänen, R. 7839
Vaitkus, M. R. 6483
Vajna, L. 2267
Vakkari, P. 8233
Valadon, A. 8560
Valappil, N. I. 6139
Valdenaire, J. M. 5152
Valdés, E. 1458, 9136
Valdés, S. 822
Valeggia, C. 2502
Valencia Ávalos, S. 1323
Valentin, G. 4586
Valentine, H. T. 2927, 4218, 6956
Valentine, J. 3340
Valentini, R. 1037-1038, 1606, 3615, 4523, 5199, 6701, 7194
Valenzuela, E. 4009
Valette, J. C. 2152, 8879
Valhari, M. U. 7172, 8907
Valiela, I. 5304
Valigura, R. A. 922, 2787
Valinger, E. 2937, 3487, 3560
Valkenburg, J. L. C. H. van 3104
Valkonen, J. P. T. 438
Valkonen, S. 6971
Válková, L. 3304
Vallack, H. W. 7563-7564
Valladares, G. R. 2320
Vallée, G. 185, 7736, 8566
Vallejo, A. 1706
Vallejo, V. R. 1190, 5251, 5307, 7889, 7911
Vallentgoed, J. 638
Vallon, C. 2993
Valterová, I. 5392
Van Aarde, R. J. 3211
Van Apeldoorn, R. C. 6693
Van Auken, O. W. 550, 7255, 9013
Van Averbeke, A. 9185
Van Bel, A. J. E. 7178
Van Boxel, J. H. 1401
Van Breemen, N. 5323, 6329, 7976, 9364
Van Buijtenen, J. P. 3366
Van Campo, E. 2125
Van Cleve, B. 1251, 1279, 2987
Van Cleve, J. R. 4437
Van Daalen, J. C. 223-224
Van Dam, B. C. 1464
Van Dam, D. 5318, 9364
Van Damme, E. J. M. 5563
Van Damme, L. W. 2634
Van Damme, P. 982
Van de Beek, H. 4474
Van de Ende, P. 8471
Van de Venter, H. A. 8589
Van den Beldt, R. J. 760, 7384, 8383
Van den Briel, J. 1546
Van den Burg, J. 320, 889
Van den Dool, E. 9084
Van den Driessche, R. 3617
Van den Eynden, V. 982
Van den Hout, K. D. 7105
Van der Bank, H. 7378
Van der Bank, M. 7378
Van der Eerden, L. 1971, 3789
Van der Eerden, L. J. 2045
Van der Eerden, L. J. M. 1966, 3645
Van der Graaf, S. 1547
Van der Ham, R. W. J. M. 8964
Van der Hoek, R. 1555
Van der Jeugd, H. P. 4065
Van der Kamp, B. J. 4392, 6631
Van der Maarel, E. 3307
Van der Meer, P. J. 6570
Van der Meiden, P. 804
Van der Merwe, S. W. 4973
Van der Moezel, P. G. 67, 3138
Van der Pas, J. B. 1537
Van der Salm, C. 7978
Van der Sijde, J. H. R. 61
Van der Voet, H. 4217
Van der Zel, D. W. 6989
Van der Zwet, T. 9122
Van Deusen, P. C. 261, 1026, 9352
Van Devender, T. R. 8147
Van Dijk, C. 4852
Van Dijk, H. F. G. 3665, 5318, 5323
Van Dijk, S. 1681
Van Dongen, S. 5717
Van Doorsselaere, J. 2087, 7377
Van Dorp, D. 1519
Van Ek, R. 3655, 6345
Van Frankenhuyzen, K. 675, 5727, 7503, 7507, 8354
Van Gelder, B. 5925
Van Genderen, M. K. 350
Van Haveren, B. P. 3230
Van Hecke, P. 6959, 8700
Van Hees, A. F. M. 797
Van Hensbergen, H. J. 3210
Van Heurck, P. 5703, 6653
Van Hoof, L. 6952
Van Horen, C. 8556
Van Houten, H. 8491
Van Hove, L. W. A. 2862
Van Kammen, A. 8264
Van Kessel, C. 1138
Van Konijnenburg-van Cittert, J. H. A. 508
Van Kooten, G. C. 1961, 7015, 8540, 8546
Van Laar, A. 179, 181-183, 1034
Van Langenhove, H. 9334
Van Lear, D. H. 8501, 8708
Van Leeuwen, N. F. M. 2866
Van Leuven, F. 5563

Van Maaren, A. 807
Van Miegroet, H. 1953, 3576-3577, 5246, 7887
Van Montagu, M. 2087, 7377
Van Niejenhuis, A. 3980
Van Noordwijk, M. 7666, 10102
Van Noort, S. 620
Van Oosten, J. J. 459, 1879, 2082
Van Ooy, D. J. 7102
Van Poucke, G. 8558
Van Praag, H. J. 1445
Van Rhijn, P. 8270
Van Riet, A. 4676
Van Rompaey, R. S. A. R. 1334
Van Rooyen, M. W. 8391
Van Rooyen, N. 3206, 5451, 8160
Van San, N. 2331
Van Soest, P. J. 970
Van Splunder, I. 5842, 9963
Van Staden, J. 86, 448, 981, 1716, 2062, 4282, 9476
Van Steenis, W. 3590
Van Teylingen, M. 612
Van Valkenburg, J. L. C. H. 3104
Van Veen, J. A. 1142, 5312
Van Veenendaal, W. L. H. 8071
Van Velzen, H. P. 3901
Van Vliet, P. C. J. 7929
Van Wesemael, B. 8783
Van Wieren, S. E. 1519
Van Wijk, C. K. 3631
Van Wijngaarden, W. 7684
Van Wilgen, B. W. 529, 1193
Van Wyk, A. E. 399, 2961, 3719, 3849
Van Wyk, B. E. 7378
Van Wyk, G. 5468
Van Wyk, G. F. 2832
Van Wyk, G. R. 8897
Van Wyk, W. J. 2552
Van Zuilen, C. M. 6521
Vanangamudi, K. 2488
Vance, N. C. 417, 1455
Vanclay, J. K. 1595, 4428, 5017, 5939, 6180, 6210, 6215, 8730
Vandekerkhove, K. 7604
Vanden Berghe, D. 6952
Vandenbeldt, R. J. 760, 1564, 1919, 3275, 4101, 7384, 8383
Vandenberg, W. 5020
Vandenbrauaene, I. 8266
Vander Mijnsbrugge, K. 6821
Vander Ploeg, J. L. 128
Vander Wall, S. B. 691, 693
VanderJagt, D. J. 7176
Vanderleyden, J. 8270
Vandermeer, J. H. 547, 3438
Vandersall, H. L. 1194
Vandetta, T. 8835
Vane-Wright, R. I. 5921
Vaněk, T. 8685
Vangelisti, R. 7100
Vanhaelen, M. 4292
Vanini, A. 6232
Vankat, J. L. 3933
Vanlangenhove, G. 8434
Vanlauwe, B. 8434
Vann, A. R. 6708
Vann, D. R. 1169, 4478, 5954
Vann, S. R. 5651
Vanner, A. 4342
Vanner, A. L. 1758, 8598
Vapaavuori, E. 3013
Vapaavuori, E. M. 3802, 8098
Vardaka, E. 6331
Väre, H. 5957, 6295
Varela, A. 1916
Varelides, C. 7780
Varese, M. 9800
Vargas, A. 6795
Vargas, J. D. 8355
Vargas-Hernandez, J. 566, 4829
Varghese, M. 1987
Varman, K. S. 10076
Varmola, M. 6860, 6937
Varney, G. T. 7128
Varskog, P. 9692
Vasanthakrishna, M. 4011, 4851, 5600, 6617
Vasconcelos, M. J. P. de 2920
Vasil, I. K. 6789
Vasilenko, A. V. 853
Vasil'ev, A. A. 7198
Vasiliauskas, S. A. 549
Vásquez, R. 491
Vásquez, W. 222
Vassal, J. 4648
Vassiliev, B. 9782
Vasudeva, R. 70
Vatkovskii, S. S. 7198
Vattulainen, A. 7989-7990
Vaughan, D. 5274
Vaychis, M. 8796
Vázquez, A. 2970
Vazquez, A. A. 1466
Vázquez, G. 6456
Vázquez, L. L. 9136
Vázquez-Yanes, C. 3549
Veblen, T. T. 1865, 3291, 4470
Vedyushkin, M. A. 1411
Veen, G. 4742
Veen, J. A. van 1142, 5312
Veena 6416
Veenendaal, W. L. H. van 8071
Veeranjaneyulu, K. 3779, 3782
Veerendra, H. C. S. 1679
Veerkamp, M. T. 9084
Vega, J. A. 6463, 8883
Veiga, J. E. R. 5217
Veiga Filho, A. de A. 5217
Veijalainen, H. 898, 4297
Veijanen, A. 7990
Veillon, J. M. 8983, 9888
Veisten, K. 2483, 10134
Vejre, H. 7962
Vela, M. H. 8788
Velazhahan, R. 2295
Velázquez, A. 3079, 3895, 5448
Veldkamp, E. 290, 718, 2409
Velimirović, V. 2314
Vellidis, G. 5346
Velling, P. 7345
Velzen, H. P. van 3901
Venables, L. 5725, 5785
Vendramin, G. G. 2194, 3974, 8227
Venkaiah, K. 102, 104, 864
Venkanna, P. 523
Venkatesha, M. G. 641
Venkateswarlu, P. 29, 4227, 5050, 6867, 9420
Venter, H. A. van de 8589
Ventura Cupido, R. L. 4630
Venugopal, B. 4644
Vera, C. J. 4069
Verbyla, D. L. 8366
Veretennikov, A. V. 5064
Verger, M. 570, 2586
Verhagen, H. L. M. 2877, 2904
Vericad, J. R. 7516
Veríssimo, A. 7568
Verma, K. S. 848, 6089
Verma, N. K. 8436
Verma, R. K. 7385
Verma, S. C. 2309
Verma, T. D. 1488, 3192, 5730
Vermetten, A. W. M. 2877
Verner, J. 4901
Verno, L. L. de 573
Verschoor, P. 150
Verstraten, J. M. 1296, 8783
Vertanen, A. 5960
Vertessy, R. 7551
Vertinsky, I. 43, 238
Vertinsky, I. B. 4457
Verwijst, T. 1064, 3604, 6978
Vesa, L. 7770
Vesala, T. 5324, 6351
Veselá, D. 8685
Veselá, M. 6550
Vesterdal, L. 5256
Vetaas, O. R. 1399, 1404, 4598
Veth, R. 9478
Vetrova, V. P. 10046
Vettenranta, J. 3462
Vettori, G. 2266
Vézina, L. P. 317, 5138
Vian, B. 5584
Viana, V. 524
Vianello, A. 9845
Vianna, M. C. 9907
Viano, J. 9891
Vicario, F. 8227
Vicente, O. 5542
Victoria, R. A. 9594
Victoria, R. L. 3790
Vida, J. B. 8281
Vidal, A. 244
Vidal, M. 5307
Vidal-Madjar, D. 7009
Vidaver, W. E. 1220
Vidrich, V. 435
Viegas, D. X. 1192
Viegas, M. T. 1192
Viegi, L. 7100
Vieira, J. A. N. 1626
Vieira, P. C. 3742
Vieira, S. 4085
Vieitez, A. M. 3395, 8580
Viémont, J. D. 5571
Viereck, L. 2755
Viereck, L. A. 1029
Vietnam, National APAN Secretariat 9316
Vighi, M. 1978
Vignali, G. 6232
Viherä-Aarnio, A. 5184, 7726-7727, 7766
Vijay Laxmi 4123
Vijay Rani 8232
Vijaya Kumar 9805
Vijayakumar, R. 9760
Vijayakumari, K. 2061, 6946
Vijayan Clement 283
Vijendra Rao, R. 4673
Vike, E. 5330
Vilà, M. 3865
Vilain, C. 8082
Vilela, E. A. 1367
Vilela, E. F. 3742
Viljoen, C. D. 576
Villa Nova, N. A. 8378
Villaba, M. 7177
Villalba, R. 3291, 4470
Villalón Mendoza, H. 241
Villani, F. 1437, 5511
Villanueva, V. R. 446
Villaquirán, A. 5458
Villar, M. 1313
Villar, R. 6474
Villard, M. A. 4067, 4916
Villard, P. 7520
Villeneuve, N. 6747
Villiers, A. J. de 8391
Villiers, J. F. 9889
Vinaya Rai, R. S. 2902
Vincent, G. 9473
Vincent, J. R. 2715-2716
Vincent, S. L. 620
Vine, D. M. le 9635
Vinod Kumar 2623
Vinogradov, B. V. 1407, 7322, 7668
Vinoth Thomas 7157
Vinson, T. S. 5209, 9661
Víquez C., M. 4146
Vir, S. 5675, 5734
Virendra Singh 79, 1678, 2658, 2952, 3388, 9432
Viret, O. 5664
Viriot, C. 8089
Viršček-Marn, M. 5546
Virtanen, R. 6494
Virtanen, T. 9117
Visalakshi, N. 3712
Vissage, J. S. 1815
Visser, H. 7665
Visser, J. M. 7321
Visser, P. H. B. de 3632, 3664, 5290, 7963
Visser, S. 1498, 7394
Vit-Olivier, P. 1232
Vita, F. 6546, 9957
Vitale, A. 6421
Vitale, M. 8935
Vitali, A. 9830
Vítková, H. 457
Vitousek, P. M. 2827, 2918, 2951, 3103, 4191, 4467, 4492, 6287, 7311, 7882
Vitt, D. H. 7871
Vittoz, P. 6398
Vivekanandan, K. 5115
Vivekanantharaja, S. 1368
Vivin, P. 2830, 6470
Vlasov, B. E. 3229
Vlassak, K. 8270, 8434
Vletter, J. de 8601
Vliet, P. C. J. van 7929
Vlietinck, A. J. 6952
Vlonga, Ş. 8604
Vodnik, D. 2249
Voerkelius, S. 3823
Voesenek, L. A. C. J. 9963
Voet, H. van der 4217
Voets, T. 8270
Vogel, B. S. 6484
Vogel, C. S. 5228, 7191, 7200
Vogel, S. 9797
Vogelmann, J. 2790
Vogelmann, J. E. 4034, 6998, 7840
Voggenreiter, V. 3930
Vogt, D. J. 8139
Vogt, G. 9436
Vogt, K. A. 3562, 8139, 9705
Voisin, N. 1861
Volin, J. C. 2492, 9752
Volk, K. J. 1811
Volk, T. A. 2141, 2165
Völkel, J. 288
Volker, P. W. 8241
Vollbrecht, G. 5624-5625
Vollebrecht, G. 10005
Volleková, A. 1922
Vollenweider, P. 6398-6399, 8944
Vollrath, B. 2878
Volney, W. J. A. 1482
Volokitina, A. V. 9769
Voltzow, J. 276
Volz, H. A. 6350
Volz, K. R. 4235
Vompersky, S. E. 533
Von Aderkas, P. 6591, 7359
Von Arnold, S. 3133, 3405, 3759, 5502, 6049, 8231
Von Behaim, D. 10110
Von Berger, R. 7487
Von Borries, D. 7922
Von dem Hagen, O. 8521
Von der Gönna, M. A. 7855
Von der Heide-Spravka, K. G. 2056
Von Euler, F. 2178, 9415
Von Finckenstein, B. 9657
Von Fircks, H. A. 1064, 8317
Von Fircks, Y. 8047
Von Fischer, J. C. 9693
Von Gadow, K. 7003, 9524, 9578, 9601
Von Habeck, F. 3902
Von Haeupler, H. 3923
Von Hofsten, H. 188, 8670, 9551
Von Lührte, A. 4524, 10159
Von Malphettes, C. B. 5737
Von Maydell, H. J. 4167
Von Schwartzenberg, K. 3797, 4698
Von Sydow, F. 4041, 9989
Von Teichman, I. 3719-3720, 3848
Von Weissenberg, K. 5752-5753, 9091
Von Willert, D. J. 2839, 8817
Von Wilpert, K. 5948, 9696, 9755
Voogd, J. C. H. 1967
Vooková, B. 488, 838, 8191, 8287
Voorhis, N. 2321
Voris, H. K. 9222
Vornam, B. 5535, 9987
Vorobeichik, E. L. 7994
Vorob'ev, G. V. 8200
Voronin, P. Yu. 7198
Vorosmarty, C. J. 1834, 3551

Vos, J. 9172
Vose, J. 5302
Vose, J. M. 1090, 1270, 2011, 2506, 8756
Voško, M. 6811
Vosti, S. S. 8491
Vouland, G. 4890
Voutetaki, A. 9334
Vovides, A. P. 3835
Vozzo, J. A. 2533-2534
Vranković, A. 4726
Vrbova, M. 1254
Vries, B. de 3590
Vries, F. W. de 9074
Vries, M. de 8062
Vries, R. A. J. de 5460
Vries, S. M. G. de 826, 1062
Vries, W. de 1163, 1967, 5338, 7978
Vriesen, S. 7430
Vrijmoed, L. L. P. 7384
Vrkoč, J. 5392
Vtorova, V. N. 1940
Vujcic, S. 5508
Vujičić, R. 88, 3721
Vukelić, J. 4724, 4774
Vuokko, R. 7560, 7781
Vuorinen, A. H. 8098
Vuorinen, M. 5397
Vyas, S. C. 2593
Vydryakova, G. A. 10046
Vyšny, J. 581
Vysotskiĭ, A. A. 197, 8200
Waage, J. K. 7439
Wada, H. 9822
Wada, K. 689
Wade, D. D. 176, 2912
Wade, S. 5801
Waelkens, F. 8270
Wagenführ, R. 4641, 4662
Wagner, E. 3769
Wagner, F. 4235
Wagner, F. G. 8541
Wagner, I. 1423, 7366
Wagner, J. 9454
Wagner, L. J. 5616
Wagner, M. R. 5766, 6059, 10036
Wagner, R. G. 4349
Wagner, S. 9344
Wagner, U. 2084
Wagner, W. L. 7237
Wagner, W. S. 2138
Waguchi, Y. 7474
Wahid, R. A. 8590
Wahjono, D. 1849
Wahl, W. 779, 5949
Wahyono, D. 1848
Waide, R. B. 1065, 1892, 6292
Waite, C. E. 2864
Wakasugi, T. 2193
Wake, C. M. 9983
Wake, G. C. 5019
Wakita, Y. 6053
Walbridge, M. R. 7270
Walder, K. E. 3424
Waldrop, T. A. 2470, 5134, 6128
Walentowski, H. 7282
Wali, A. 3494
Wali-ur-Rehman 5679, 5781
Walker, B. H. 4997
Walker, C. 600, 906
Walker, D. 1643, 2084
Walker, D. H. 10103-10104
Walker, G. J. 735
Walker, G. K. 5744
Walker, G. R. 2837, 3322, 3616, 8809
Walker, I. 1100
Walker, J. 1346, 8454
Walker, L. R. 276, 1065, 1073, 1077, 1082, 1335, 3095, 3872, 5455, 6292
Walker, R. 5302
Walker, R. B. 3628, 7053
Walker, R. F. 7662, 7967
Walkinshaw, C. H. 2278, 7346
Wall, G. W. 3003
Wall, R. E. 3451
Wall, S. B. vander 691, 693
Walla, J. A. 2282
Wallace, D. J. 9365
Wallace, J. S. 9357
Wallace, R. B. 7323
Wallander, H. 2072, 2246, 3159, 8256
Wallenda, T. 2072, 7393
Waller, M. P. 3062
Walli, C. 6900
Wallin, D. O. 4133
Wallin, J. E. 5509
Wallner, W. E. 5796
Walls, J. 3670
Walsh, J. L. 1860
Walsh, K. B. 7715
Walsh, M. E. 5342
Walsh, N. G. 3296
Walsh, P. J. 4797, 4884
Walsh, T. A. 1035
Walter, C. 5503
Walter, D. E. 621
Walter, G. H. 2361, 4029
Walter, M. 10016
Walters, J. R. 3209
Walthall, C. L. 33, 1044
Walthert, L. 4721
Walujkar, R. B. 6726
Wamara, J. B. 5362
Wambugu, T. W. 3611
Wandji, J. 8911
Wang, B. 9600
Wang, B. F. 9600
Wang, B. S. P. 3387
Wang, D. 3621, 8495
Wang, D. F. 7457
Wang, G. 2358
Wang, G. G. 3489, 6253, 8704
Wang, H. 5945, 7619, 8984
Wang, J. H. 9426
Wang, J. R. 9516, 9596
Wang, K. 7861
Wang, L. 7215
Wang, L. H. 8213
Wang, N. S. 5931
Wang, Q. 1906, 3777, 9846
Wang, T. 9980
Wang, T. Z. 10009
Wang, W. P. 2979
Wang, W. Y. 5531
Wang, X. R. 8221, 9048
Wang, Y. 1616, 1858, 2690, 4417, 6227, 6895, 7820, 8703
Wang, Y. H. 5963
Wang, Z. H. 3235
Wang, Z. M. 3978, 9666
Wang, Z. Y. 8800
Wani, A. G. 7582
Wankhede, D. B. 430
Wanless, H. R. 4481
Warbington, R. 4444
Warburton, B. 1507-1508
Ward, B. 8463
Ward, D. E. 527
Ward, D. L. 6906
Ward, J. S. 174
Ward, S. C. 67, 1542
Ward Thompson, C. 9552
Wardani, M. 1324
Wardlaw, T. J. 7395
Wardle, J. 6297
Wardle, P. 526
Ware, A. B. 620
Ware, G. 7486
Warfvinge, P. 1905, 3674, 7683, 8510
Wargo, P. M. 9677
Warhurst, D. C. 8691
Waring, R. H. 1043, 1338-1339, 1343, 1347, 2066, 2691, 2851, 2992, 4174, 4694, 5412
Warkotsch, W. 4249
Warne, E. L. 2157
Warner, C. 7615
Warner, K. 4166
Warner, T. A. 260
Warr, S. J. 3831
Warrag, E. I. 878, 6301
Warrington, S. 2634, 9340
Washitani, I. 9844
Wasim Ahmed 8908
Wasniewski, T. A. 6360
Wästerlund, D. S. 822
Wastra, S. S. 2397
Watahiki, K. 5123, 5839
Watanabe, K. 6650
Watanabe, M. 450
Watanabe, N. 4664
Watanabe, S. 1735, 6585
Watanabe, T. 2252, 3743, 9019
Watanabe, Y. 4285, 9451
Waterhouse, J. S. 9853
Waterloo, M. J. 3806
Waters, D. 354
Waters, J. R. 3145
Waterson, J. 5121
Watmough, S. A. 8855
Watson, A. 1359
Watson, A. E. 9306
Watson, B. 6999
Watson, G. D. 711, 3596
Watson, G. W. 2056, 3407
Watson-Craik, I. A. 4096
Watt, M. P. 90, 4277
Watterston, K. G. 5349
Watts, J. 6196, 6795, 7600
Watts, W. A. 513
Waugh, R. 5528, 5548
Wawer, M. 1337
Wawrzyniak, S. 390
Way, J. 1029-1030
Way, J. B. 2755
Wazihullah, A. K. M. 6172
Weatherley, N. S. 7127, 8020
Weatherly, H. G. 1005, 2170
Weathers, K. C. 6261
Weaver, J. E. 666
Weaver, R. W. 3408
Webb, R. E. 5725, 5785-5786, 7498
Webb, R. S. 9090
Webb, S. L. 2138
Webb, T., III 4805
Webber, J. 5633
Webber, J. E. 2103, 4813, 9327, 9428, 9873
Weber, J. A. 6497
Weber, K. E. 6011, 8413, 8442, 8446
Weber, M. G. 2002
Weber, R. 3158
Weber, R. O. 3330
Weber, U. M. 6765
Webster, G. R. B. 1770
Webster, R. 10064
Webster, T. C. 8682
Weck-Hannemann, H. 264
Wedler, M. 4561
Wee, Y. C. 3873, 10133
Weeraratna, C. W. 1668
Weerawardane, N. D. R. 5054
Weetman, G. F. 2535, 4399, 4407, 9368
Wegener, G. 1990
Wegener-Strake, A. 4566
Wegensteiner, R. 7471
Wehrung, D. A. 238
Wei, R. P. 9049
Wei, S. M. 9600
Wei, Z. M. 6895
Weih, M. 2885
Weih, R. C. 6239
Weikert, R. M. 4561
Weiler, E. W. 3778
Weimann, H. J. 7827
Wein, G. 3283
Wein, R. W. 1198, 3700, 5362
Weiner, G. 6414
Weiner, J. 3865, 3884
Weinstein, A. 6013
Weinstein, D. A. 1976
Weinstock, J. A. 1528
Weintraub, A. 7828
Weir, J. M. H. 10137
Weir, P. L. 4693
Weir, R. J. 5068
Weisberg, P. J. 7822
Weiser, F. 4230
Weisgerber, H. 6511, 7735
Weishampel, J. F. 1039, 5457
Weiss, B. 4662
Weiss-Schmitt, D. 3640
Weissen, F. 1445
Weissenberg, K. von 5752-5753, 9091
Weissflog, L. 4188, 4555-4556
Weitz, A. M. 718, 2409
Welander, M. 5067
Welander, N. T. 3315
Welch, D. 9576
Welch, J. M. 740
Welch, R. C. 6662
Welch, S. 2583
Welker, J. M. 4517
Wellburn, A. R. 2882, 3646, 9679
Wellburn, F. A. M. 3646
Welle, B. J. H. ter 8069
Wellenstein, G. 5803
Welles, J. M. 1339
Wells, A. J. 5790
Wells, C. G. 5355
Wells, D. W. 2375
Wells, E. D. 1714
Wells, J. M. 4861, 9713
Wells, R. E. 254
Wells, R. J. 4300
Welsh, C. J. E. 1524
Welsh, D. A. 4427
Welte, E. 9324
Wen, J. 2053, 7166
Wendt, T. 8057, 8131
Wenk, G. 4222
Wenner, N. G 8294
Wennström, A. 5665
Wenny, D. L. 848
Wenske, S. 4424
Wentworth, J. M. 5827, 10059
Wenzel, K. D. 4555-4556
Wenzel, W. 8836
Wenzel, W. W. 7886
Werger, M. J. A. 1395, 3550, 7274
Wermelinger, B. 8327
Werner, A. 1454, 7396
Werner, M. 3777, 9846
Werner, P. A. 1867
Werner, R. A. 5784
Werren, M. 2689
Weseloh, R. M. 2330
Wesemael, B. van 8783
Weslien, J. 2383, 4126, 7485
Wesołowski, T. 4064
Wessel, W. W. 1093, 7892
Wessels, H. P. 2669
Wessels, N. 4973
Wessely, A. 7754
Wessman, C. A. 1865
Wessolek, G. 4524, 10159
West, A. K. 8245
West, D. 7547
West, N. E. 2385
West, P. W. 1717, 3463, 5372, 5959, 6193, 8650
West, R. J. 5705
West, S. H. 84
Westcott, R. J. 5086
Weste, G. 3954
Westerberg, D. 9488
Westgate, J. W. 6529
Westley, S. B. 3309
Westling, H. O. 8002
Westman, P. 1571
Westoby, M. 484, 2938, 3955
Weston, P. H. 7224-7225
Westphal, S. 3769
Weststrate, J. H. 2877
Weterings, K. 7355
Wetlands 6799
Wetsy, E. J. 2975
Wetterer, J. K. 6661
Wetteroff, J. J. 9863
Wetzel, S. 4684, 7793
Wetzlar, L. 2669
Wetzstein, H. 6397
Wetzstein, H. Y. 118
Whalley, A. J. S. 9104
Wheatcroft, R. 5657
Wheeler, C. T. 4527
Wheeler, E. A. 8070
Wheeler, N. C. 5481
Whelan, C. J. 4908
Whelan, R. J. 3697, 9318
Whereat, E. B. 7032

Whetten, R. 8226
Whiffin, T. 5434, 6769
Whigham, D. F. 1081, 6122
Whilhelmsson, L. 9974
Whisenant, S. G. 6556
White, C. S. 3636
White, D. A. 5344
White, D. E. 2650-2651, 5143
White, D. L. 6128
White, D. W. R. 5503
White, E. 5756
White, E. H. 3666, 6029
White, F. 6542
White, G. B. 5785
White, I. M. S. 2802
White, J. 6786
White, J. E. J. 6148, 6160
White, J. R. 6270
White, L. J. T. 3223
White, M. 5371
White, M. A. 1587, 3933, 4130, 6568
White, M. V. 2878
White, P. J. 3200
White, P. S. 2166, 3882
White, R. 1375
White, T. A. 4463
White, T. L. 84, 3377, 8217, 8507, 9107
White, W. B. 2303
Whitehead, D. 1124, 2010, 7026
Whitehead, P. G. 702
Whiteman, A. 3169
Whitesell, C. D. 947
Whitford, K. R. 7661
Whitham, T. G. 4014, 5754, 6594
Whitlow, T. H. 5908, 6390
Whitman, E. P., II 8575
Whitmore, F. W. 74
Whitmore, R. C. 673, 3179
Whitnay, M. D. 2716
Whitney, N. J. 5657, 8856
Whittaker, J. B. 4573
Whittaker, R. J. 1403
Whitten, V. A. 3032
Whittier, J. 7605
Wi, A. J. 5699
Wiant, H. V., Jr. 4382, 6164, 8692
Wibe, S. 4994
Wibowo, A. 1996, 2000, 2280
Wickramasinghe, A. 4105
Wickremesinhe, E. R. M. 863, 2679
Widell, S. 6478
Widiarti, A. 1985
Widjaja, E. 7714
Widjaja, E. A. 2480
Widmann, R. H. 3351
Widmoser, P. 7881
Widrlechner, M. P. 4984
Wiebelt, M. 4101
Wieber, A. M. 5785
Wieczorek, K. 9010
Wiedey, G. A. 5241
Wiegand, S. 6340
Wiegrefe, S. J. 5541
Wiemann, M. C. 490, 8900
Wiemken, A. 7390
Wiemken, V. 7390
Wienand, K. T. 6319, 9466
Wiener, L. 2354, 2357
Wienhaus, O. 9864
Wieren, S. E. van 1519
Wiersum, K. F. 3260, 6106, 6795, 8513
Wieser, G. 2885, 7099, 7187
Wiest, S. C. 68
Wigand, P. E. 9917
Wightman, R. A. 6199
Wigley, T. B. 1572, 7304, 7513
Wigneron, J. P. 1032
Wijesinghe, Y. 3300
Wijeyaratne, M. J. S. 9232
Wijk, C. K. van 3631
Wijngaarden, W. van 7684
Wijtzes, W. H. 3901
Wikeem, B. M. 1745
Wikland, K. 8260
Wiklander, G. 6284
Wiklund, K. 4538, 7966
Wikström, F. 4535, 7077
Wikström, P. 8538
Wilaiwatt Grisanaputi 7567
Wilbert, S. M. 2214
Wilby, R. L. 3336
Wilcock, C. C. 3830
Wilcove, D. 1572
Wilcox, B. A. 6719
Wilcox, B. P. 5837
Wilcox, M. D. 4258
Wilczynski, C. J. 3109
Wild, A. 2995, 3805, 4723, 6503, 7208, 7984, 9046
Wilder, J. W. 2321
Wildermuth, M. 3741, 4681
Wildi, O. 246, 2756, 7267
Wilgen, B. W. van 529, 1193
Wilhelm, G. J. 919
Wilhelmsson, L. 3134, 9875
Wilhere, G. F. 9210
Wilhoit, J. H. 7765
Wilkins, C. F. 67
Wilkins, D. 1879, 8755
Wilkins, L. C. 10150
Wilkins, S. D. 309, 1531
Wilkinson, D. M. 8276
Wilkinson, G. 2628
Wilkinson, G. R. 8711
Wilkinson, R. C. 7196
Wilkinson, R. I. 2582
Wilksch, W. 2995
Willan, R. L. 7590
Willems, A. 8266
Willert, D. J. von 2839, 8817
Williams, A. 4607
Williams, A. J. 4313-4314, 4949, 9250
Williams, C. 2755, 5508
Williams, C. G. 1430, 7358, 8208, 9876
Williams, D. J. 7842
Williams, D. L. 33, 1044, 1059, 1256, 1854, 3116
Williams, D. S. 9129
Williams, E. R. 2447, 5433, 6018
Williams, J. 4421, 9241
Williams, J. D. 8457
Williams, J. E. 3697
Williams, J. S. 9651-9652
Williams, J. T. 7714
Williams, K. 6787
Williams, L. 7808
Williams, M. R. 10121
Williams, M. S. 2503, 3314, 8506
Williams, P. A. 9278, 9487
Williams, P. J. 1013, 1632
Williams, R. A. 2639
Williams, S. A. 1061, 9680
Williams, S. N. 8875
Williams, T. B. 4382
Williams, T. G. 360, 7127
Williams, T. M. 1079
Williamson, G. B. 1179, 8900
Williamson, H. D. 3526
Willig, M. R. 1474
Willis, K. G. 9374
Willliams, G. 1312
Wills, A. 5703
Wills, R. D. 379
Willson, M. F. 3219
Wilmanns, O. 9935
Wilmot, T. R. 9860
Wilpert, K. von 5948, 9696, 9755
Wilson, A. D. 3173
Wilson, B. A. 3087, 7283, 8731
Wilson, C. A. 6641
Wilson, C. W. 4071
Wilson, D. 5656
Wilson, E. J. 3414, 3656, 5336
Wilson, G. W. 3038
Wilson, H. D. 3869
Wilson, J. 906, 5528
Wilson, J. B. 3076, 3898, 6560
Wilson, K. R. 7549
Wilson, L. A. 2306
Wilson, M. V. 3056
Wilson, N. 8529
Wilson, P. G. 7222
Wilson, P. J. 1258, 3391, 3396, 5539
Wilson, R. 5657
Wilson, S. A. 3663
Wilson, S. D. 4484, 8988
Wilson, S. M. 6050
Wilson, W. L. 2353
Wilt, F. M. 9507
Wiltshire, J. J. J. 2881
Wiltshire, R. J. E. 494
Wimalasena, S. 8920
Wimalasiri, K. M. S. 9817
Winand, C. 7743
Windham, M. T. 2279
Windham, W. R. 6465
Windsor, D. M. 5932
Wingfield, B. D. 576
Wingfield, M. J. 576, 603, 1452, 5622, 5632, 7038, 8291
Wingler, A. 2072
Wingsle, G. 3766, 5414, 6480
Winjum, J. K. 1188, 2795, 9734-9735
Winkel, T. 3508
Winker, K. 9212
Winkler, I. 5024, 7710
Winkler, M. G. 4758
Winner, W. E. 1975, 2865, 3023, 7075
Winsa, H. 6111
Winter, J. de 4960
Winter, K. 2355, 4697, 6257
Winter, T. G. 6
Winther, G. 9406
Wiratno 6728
Wirén, A. 7888
Wirminghaus, J. O. 1516
Wirth, R. 1147
Wise, D. H. 1915
Wiser, S. 6745
Wisniewski, J. 2478
Wistow, S. 5682
Wit-Rzepka, M. 1149-1150
Witcover, J. 8491
Witkowski, E. T. F. 2646, 3032, 3077, 6577
Witmer, G. W. 9228
Witt, W. 2988, 3787
Witte, L. 4742
Witter, J. A. 645-646, 1091, 5733
Wittwer, R. F. 4340, 6977
Witzell, J. 4867
Włoch, W. 390, 7156
Wodzicki, T. J. 9854
Woerner, M. 301
Wofsy, S. C. 3328, 8924
Wohlers, A. 2504
Woinarski, J. C. Z. 10129
Woitchik, A. F. 4676
Wojtusik, T. 2596
Wolda, H. 2123
Wolf, A. T. 6826, 8936
Wolf, J. H. D. 1387
Wolf, S. S. 7505
Wolfe, M. H. 3639
Wolff, H. P. 8424
Wolff, J. L. C. 5533
Wöll, T. 4964
Wöllner, F. 4979
Wolstenholme, R. 895
Wolter, M. 5333
Wolterbeek, H. T. 3749
Wolters, V. 1593, 7931, 7933
Woltz, P. 9128
Wolynetz, M. S. 1318, 9870
Wong, A. 3040
Wong, B. L. 10001
Wong, F. K. 2908
Wong, K. C. 6441, 9803
Wong, K. M. 7159, 7331
Wong, M. T. F. 8679
Wong, W. C. 3356
Wood, C. J. 6272
Wood, C. S. 7527
Wood, C. W. 7765
Wood, D. 5857
Wood, D. L. 5645, 7400, 7473
Wood, D. M. 1520, 7310
Wood, G. B. 2501, 6164
Wood, H. B. 5360
Wood, M. K. 7554
Wood, W. 2755
Woodard, P. M. 4372, 8030
Woodbury, P. B. 3654, 5644
Woodcock, C. E. 4444-4446
Woodcock, D. W. 268, 4623
Woodcock, H. 8944
Woodell, S. R. 3833
Woodger, G. H. 8056
Woodhouse, C. A. 5167
Woodrow, I. 2086
Woodrow, I. E. 434
Woods, C. 7127
Woods, J. 555, 4827
Woods, J. H. 2590
Woods, K. D. 5473
Woodward, A. 2098
Woodward, F. I. 2135, 2794, 6238
Woodward, S. 5628, 5662-5663
Wookey, P. A. 1970
Woollons, R. C. 5015
Woomer, P. L. 8491
Wooten, J. B. 2019
Wooten, J. W. 8174
Worden, E. 3399
Worf, G. L. 5655
Worrall, J. J. 1593
Worrell, R. 7142, 9546
Worthington, R. D. 421
Woźniak, A. 3474-3475
Woźny, A. 1227, 7084
Wrangham, R. 2489
Wrann H., J. 6146
Wray, V. 9818
Wright, C. J. 2881
Wright, D. 4172
Wright, E. 1509
Wright, G. 1995
Wright, G. R. 1506
Wright, J. 2225
Wright, J. A. 60, 3968, 3979, 6866, 7348
Wright, K. D. 711
Wright, L. L. 6100
Wright, R. F. 3677, 5245, 5305, 5320, 5322-5323, 6329
Wright, R. J. 9189
Wright, S. J. 1916, 2123, 7946
Wright, W. J. 8818
Wrigley, T. J. 8824
Wróblewski, L. 6976
Wu, H. I. 7667
Wu, H. X. 5479
Wu, J. 2029
Wu, Q. X. 5841, 10082
Wu, R. 5551, 7338
Wu, R. L. 593
Wu, S. C. 8066
Wu, W. M. 9768
Wu, Y. 4953
Wu, Y. C. 1345, 4444
Wu, Y. Z. 2384
Wu, Z. Y. 9905
Wulf, A. 5636, 5646, 7405
Wulf, R. de 7604
Wulff, A. 23, 348, 5317, 9746
Wullschleger, S. D. 1283, 3648, 4703, 6263, 6475
Wurtz, T. L. 4483
Wydeven, A. P. 7526
Wyk, A. E. van 399, 2961, 3719, 3849
Wyk, B. E. van 7378
Wyk, G. F. van 2832
Wyk, G. R. van 8897
Wyk, G. van 5468
Wyk, W. J. van 2552
Wylie, F. R. 7204, 7421
Wyman, R. L. 1924
Wynne, I. R. 5696
Wynter, P. E. 3354
Wyttenbach, A. 2982, 5394, 7958
Xamena, J. 7909
Xayvongsa, L. 4641
Xi, Y. 5142
Xia, B. 7614
Xia, C. S. 7215
Xiao, G. S. 7373

Xiao, Z. D. 2218
Xie, C. Y. 555, 2105, 2549, 5478, 9419
Xie, F. X. 1601
Xie, Y. M. 3760
Xie, Z. R. 3252
Xijin, Z. 5669
Xiong, W. 10106
Xiong, Y. G. 4259
Xu, G. H. 6768
Xu, H. C. 2057
Xu, H. F. 7544
Xu, M. 8161
Xu, N. 6895
Xu, X. C. 8758
Xu, Y. 6332
Xu, Z. F. 8984
Xu, Z. H. 6895
Xuan, S. P. 2218
Xue, D. S. 896, 3406
Yachkaschi, A. 1874
Yacouba, T. 9069
Yadama, G. N. 9388
Yadav, B. D. 2461
Yadav, R. C. 8397
Yadav, R. R. 4605
Yadava, R. B. 9417
Yaga, S. 7175
Yagi, F. 8095
Yagi, H. 6126, 9536, 9925
Yahner, R. H. 165, 3216
Yair, A. 8379, 9238
Yajima, T. 6910
Yakushina, Ė. I. 5905
Yamada, I. 5922
Yamada, T. 4865, 5776-5777, 6630
Yamada, Y. 962
Yamaguchi, D. K. 363, 5167
Yamaguchi, O. 3142
Yamaguchi, T. 4702, 9450
Yamamoto, F. 3773, 6361, 9879
Yamamoto, H. 1177, 2700, 4585, 4590, 4643, 6274, 6359, 7463
Yamamoto, K. 1822, 4193, 6435
Yamamoto, N. 2215, 3130, 5515
Yamamoto, S. 4327, 4749, 4801, 6523, 6917, 8178, 9021, 9263, 9792
Yamamoto, S. I. 6917, 9021, 9792
Yamamoto, T. 1777, 4360, 6824, 7712
Yamamoto, Y. 1624, 9452
Yamanaka, N. 8157, 8950
Yamanaka, T. 9999
Yamanoi, K. 1117, 1189
Yamashita, T. 9960
Yamate, H. 9453
Yamazaki, S. 6655
Yamazaki, T. 6603
Yamuna, P. 7732
Yan, J. J. 2335
Yan, S. Q. 9166
Yan, Z. 4879, 5674
Yan, Z. G. 4879
Yanagi, K. 7174
Yanai, R. D. 1976, 4195
Yanai, S. 7213
Yanbaev, Yu. A. 5495
Yanchuk, A. 7497
Yanchuk, A. D. 574, 3135
Yang, B. 5684
Yang, B. G. 9223
Yang, C. 2995
Yang, D. 9124
Yang, J. C. 4835
Yang, J. K. 5688
Yang, J. L. 1347
Yang, K. C. 1182, 2028, 2899, 6395, 7122
Yang, L. F. 4835
Yang, L. L. 9820
Yang, R. C. 175, 595, 3124
Yang, S. 10106
Yang, S. D. 310, 2843
Yang, S. X. 7483
Yang, X. S. 3144, 3725, 7032
Yang, Z. H. 485
Yang, Z. X. 9600, 10009
Yankee, D. H. 8736
Yanovskiĭ, V. M. 663
Yanson, N. D. 6836
Yao, D. Y. 5099
Yap, S. K. 752, 8183
Yap, S. W. 445
Yasaka, M. 7213, 9947
Yash Dave 7157
Yastrebov, A. B. 1402
Yasueda, H. 3737
Yasumura, N. 9612
Yatagai, M. 544, 1237, 1247, 4670, 5390, 6445
Yates, C. J. 6573, 8141
Yates, D. J. 3554, 7944
Yau, P. 4980
Yazdani, A. 635
Yazdani, R. 1421, 3134, 5509, 9875, 9969
Yazid, S. M. 3148
Yazzie, D. 7176
Ye, H. 9169
Yeates, G. W. 7938
Yee, S. O. 4095
Yeh, F. C. 595, 3124, 5479, 5517, 5523, 9059
Yeiser, J. L. 172, 1766-1767
Yelle-Simmons, L. 4576
Yelpatyevsky, P. V. 7977
Yen, K. Y. 9820
Yendol, W. G. 9199
Yeo, J. J. 8366
Yeom, Y. C. 8878
Yero, L. 950
Yeung, E. C. 5078, 6048
Yi, C. H. 5501
Yi, C. K. 8346
Yi, H. R. 8512
Yi, J. S. 8203
Yiakoulaki, M. D. 9286
Yibrah, H. S. 5502, 8231
Yih, K. 547
Yim, K. B. 8239
Yin, G. T. 2057
Yin, R. S. 5982
Yin, X. 1130, 4142
Yin, X. W. 1130, 4142
Yin, Y. Y. 9258
Yin, Z. Y. 369
Ying, C. 5478
Ying, C. C. 2548-2549, 3367, 9419
Yli-Panula, E. 1650, 7711
Ylimartimo, A. 8304
Ylimartino, A. 1129
Ylönen, A. 438
Yoder, B. 1281, 4174
Yoder, B. J. 2066, 2992
Yokoishi, E. 4798
Yokota, S. 6053
Yokota, T. 1271, 4187, 8707
Yokoyama, M. 3669
Yokozawa, T. 8690
Yoneda, T. 6267
Yoneda, Y. 7474
Yonenobu, H. 1151, 4547
Yonzon, P. B. 10127
Yoo, B. H. 9223
Yoo, J. Y. 1813
Yoon, J. K. 8573
Yoon, K. S. 7765
Yorks, T. P. 2385
Yoshida, K. 2215
Yoshida, M. 1177, 4585, 4590, 4643, 6359, 8912, 9836, 9839
Yoshida, T. 3715, 4194, 8461
Yoshihara, K. 7465
Yoshihira, T. 3008
Yoshikawa, K. 3598-3599, 4507, 9831
Yoshimaru, H. 3123, 8225
Yoshimatsu, S. 5706
Yoshimoto, A. 1618, 1623, 3501
Yoshimoto, T. 9450
Yoshimura, T. 6194, 7831
Yoshinaga, S. 7055
Yoshizawa, N. 6053
Yosida, H. 8045
Yost, R. S. 4113
You, C. 1076
Yougma, F. 10117
Youn, H. J. 9240
Young, D. 59
Young, D. R. 7314, 8172, 8815
Young, G. D. 4592
Young, J. T. 9293
Young, K. R. 538, 4941
Young, L. J. 9189
Young, M. K. 4498, 4936
Young, P. J. 7063
Young, R. 4953
Young, R. A. 604, 5621
Young, S. S. 5470
Young, T. P. 2958, 5443
Youngblood, A. 7333
Youngs, R. L. 3356
Yousaf, N. 8253
Youssef, E. M. A. 2595
Yu, B. H. 9744
Yu, E. Y. 5740
Yu, J. 2221
Yu, J. R. 9600
Yu, X. L. 5102
Yu, Y. C. 8017
Yu, Y. W. 1914, 2400
Yu, Z. 9690
Yu, Z. S. 9690, 9705
Yu, Z. Y. 3235
Yue, D. 5138
Yue, Q. 9807
Yuen, T. D. B. 8049
Yukawa, J. 7493
Yukawa, N. 9762
Yun, J. H. 9567
Yunus, M. 5316
Yurinova, A. A. 463, 1268
Yushkov, P. I. 1954, 7979
Yusof, M. A. R. 7354, 7365
Yusof Mohamad, A. R. 7354, 7365
Zaady, E. 7407
Zaafouri, M. S. 8420
Zaballos, J. P. 1114
Zabel, C. J. 3145
Zabielski, S. 936
Zabkiewicz, J. A. 4823-4824, 4826, 7638
Zabowski, D. 1097
Zabubenin, E. 9502
Zach, P. 9154
Zachariadis, G. 7106
Zachmann, D. W. 5339
Zackrisson, O. 5464, 7259-7260, 9913
Zaczek, J. J. 4254
Zadeĭka, I. V. 7342, 7347
Zaerr, J. B. 3794
Zagas, T. 541, 9000
Zago, L. 6058
Zagolski, F. 6226
Zahir Shah 4550
Zahka, G. A. 10001
Zaidi, T. H. 2980
Zainai Mohamed 3345
Zajicek, J. 8101
Zajonc, J. 5648
Zak, D. 467
Zak, D. R. 307, 1091, 3548, 3592, 5228, 6433, 6798, 7191
Zakaria, M. 1379
Zakharov, K. S. 9812
Zakra, N. 3408
Zakrzewski, W. T. 1819
Zalewska-Gorzelska, E. J. 1957
Zaman Sher 4550
Zambolim, L. 602
Zambonelli, A. 9077
Zamolodchikov, D. G. 4544, 6449
Zamora, N. 547, 3438
Zamora-Martínez, M. C. 6955
Zamparoni, C. A. G. P. 3736
Zancani, M. 9845
Zanetto, A. 5557
Zanewich, K. P. 3795
Zangrando. E. 6566
Zani, C. L. 9798
Zanocco, D. 6663, 9174
Zanuncio, J. C. 5713, 5729, 5802
Zanuncio, T. V. 5713
Zanuttini, R. 6604
Zanzucchi, C. 6157
Zapata, F. 1289, 5153, 6321, 9724
Zárate, S. 8247
Zárate Pedroche, S. 8134, 8247
Zarnoch, S. J. 2900, 4016, 6977, 9351
Zasada, J. C. 4348, 5452
Zaslavskaya, L. A. 4244
Zavala, M. A. 2893, 8438
Zavala Chavez, F. 6534
Zavarin, E. 4738, 8087
Zawila-Niedzwiecki, T. 1850
Zayas, E. de 1458
Zayed, J. 3680
Ze Meka, E. 18
Zebker, H. 1042
Zebryk, T. 717
Zech, W. 132, 4545-4546, 5130, 6314, 7573, 7907, 8422, 8425
Zèches, M. 2579, 8078
Zedaker, S. M. 4345, 5915, 6425, 9512
Zeeuw, C. de 495
Zehavi, A. 8330
Zeide, B. 4395, 5988, 6958
Zeigler, B. P. 2920
Zel, D. W. van der 6989
Zelazny, V. 250
Zelger, M. 3649
Zelmer, C. D. 9996
Zemlyanukhin, A. I. 960
Zeng, D. P. 9086
Zerbe, S. 9004, 9493
Zeroni, M. 7670
Zhalbaa, Kh. 8181
Zhang, G. 5540
Zhang, G. F. 454
Zhang, H. 8502
Zhang, H. C. 8017
Zhang, J. H. 9006
Zhang, J. W. 1274, 2834, 4513, 8198
Zhang, L. 8832, 9737
Zhang, L. J. 787
Zhang, L. M. 6895
Zhang, M. I. N. 3013
Zhang, P. G. 1449-1450, 2256
Zhang, P. L. 8080
Zhang, S. Y. 4588, 4595
Zhang, S. Z. 3852
Zhang, X. 5142, 7764
Zhang, Y. 4208
Zhang, Z. C. 10026
Zhang, Z. M. 6401
Zhang, Z. Q. 5740
Zhang, Z. Y. 2054, 7166
Zhao, H. Y. 5841, 10082
Zhao, S. 5234, 6476
Zhao, S. Y. 7457
Zhao, Y. X. 5099
Zhao, Z. M. 9132
Zhelev, P. 561
Zheng, F. J. 9058
Zheng, Y. 6195
Zhimo, Z. 9170
Zhiri, A. 4292
Zhivotovskiĭ, L. A. 8193
Zhivotovskiĭ, V. V. 5186
Zhong, G. H. 7373
Zhong, H. 5784, 9194
Zhong, Y. 5562
Zhong, Z. C. 1395
Zhou, G. 9160
Zhou, J. Y. 8080
Zhou, P. 7215
Zhou, W. 5142
Zhou, X. 6993
Zhou, X. C. 8758
Zhou, X. L. 6993
Zhou, X. Q. 2235
Zhou, Z. F. 8770
Zhou, Z. Z. 2057
Zhu, H. 6192, 9905
Zhu, J. J. 3601
Zhu, J. W. 9153
Zhu, L. X. 7988

Zhu, L. Y. 9600
Zhu, Z. L. 3521
Zhuge, Q. 8587
Ziburski, A. 3035
Ziegenhagen, B. 7028
Ziegler, H. 2981, 4700
Ziegler, S. S. 5445
Ziehe, M. 5552, 9987
Zielinska, B. 3740
Zieliński, J. 753, 1325, 1352
Zilay, A. M. 1360, 8162
Zimmer, K. 6109
Zimmerman, J. K. 1892, 6292
Zimmerman, P. 3741
Zimmerman, P. R. 4681
Zimmermann, F. 9864
Zimmermann, R. 1127
Zimmermann, S. 4721
Zimmermann, U. 3601
Zimmermann, W. 42, 50
Zine El-Abidine, A. 1110, 3608, 5230, 8931
Zingarelli, L. 1286
Zingg, A. 6211
Zipperer, W. C. 1550, 8460
Zipse, A. W. 7651
Żkowski, H. 3343
Žnidarić, G. 6502
Zobel, A. M. 8684
Zobel, D. B. 539, 3052
Zobel, K. 3075
Zobel, M. 1363, 3075, 5001
Zobel, R. W. 6390
Zoghbi, M. das G. B. 9819
Zoglauer, K. 121-123
Zoldoš, V. 5950
Zöllner, O. 1236
Zolotareva, S. V. 8200
Zoltai, S. C. 7871
Zonn, S. V. 5267
Zope, S. 2488
Zöschg, M. 4565
Zott, U. 122
Zöttl, H. W. 2858
Zotz, G. 4697
Zou, J. 8093
Zou, J. P. 5718
Zou, N. 6620
Zou, S. W. 7988
Zoumakis, N. M. 3339
Zsuffa, L. 3998, 5517, 5523, 5553, 6029, 6392
Zu, H. 8984
Zubova, L. G. 10091
Zueva, G. V. 1962
Zuilen, C. M. van 6521
Zukrigl, K. 9936
Zulberti, E. 9267
Zulkifli Yusop 7109
Zulla, Y. 1904
Zulmaga Ramírez, S. 1205
Zumr, V. 7477
Zumrawi, A. A. 4902
Zundel, P. 9644
Zuniga, L. 6251
Zuo, L. P. 8758
Zuparko, R. L. 4898
Zushi, K. 1094
Zutter, B. R. 166, 1771
Zuuring, H. 5447
Zwet, T. van der 9122
Zwiazek, J. J. 1722, 6349, 6903
Zwieniecki, M. A. 4486, 9794
Zwier, J. C. 2627
Zwolinski, J. B. 179-183, 7038, 9505
Zyabchenko, S. S. 9740
Zykov, I. G. 4603
Zylstra, B. F. 9186

SUBJECT INDEX

Abies
- choice of species, afforestation, altitude, France 9421
- dendrochronology, increment, basal area, Germany, statistical analysis 793
- forest decline, population dynamics, simulation, Austria 6825
- fungal diseases
  - *Gremmeniella abietina* 4169
  - *Heterobasidion annosum*, USA 606
- insect pests, *Dreyfusia piceae*, Canada, predators 5695
- palaeoecology, plant succession, Greece 8989
- pollen, palaeobotany, Japan, DNA 9914
- silvicultural conversion, management, Poland 952
- soil chemistry, cation exchange capacity, Canada 5250
- stumpage value, Canada 9651
- wood anatomy
  - palaeoecology, Japan 8990
  - parenchyma 4625

Abies alba
- acid deposition
  - soil chemistry, simulation, plant composition 2889
  - throughfall, chemistry, Bulgaria 7982
- air pollution
  - foliage
    - provenance, Italy 6330
    - Slovakia 9742
  - France, measurement 1160
- artificial regeneration, protection forests, Germany 7552
- bark
  - anatomy, injuries, forest decline 4626
  - stemflow, France, pH, conductivity 3021
- choice of species, protection forests, avalanches, Germany 6869
- cones, seeds, Romania, production 8949
- deer
  - *Capreolus capreolus*, natural regeneration, browsing damage, France 1740
  - *Cervus elaphus*, natural regeneration, browsing damage, France 1740
- dendrochronology, increment, France 3290
- dendroclimatology, defoliation, Italy, growth 4989
- edible fungi, *Morchella*, Spain, ecology 2677
- embryo culture, somatic embryogenesis 5103
- fertilizers, lime, mycorrhizas, soil chemistry, Romania 1715
- flowering, forest decline, Slovenia 9862
- foliage
  - chemistry, esters 1253
  - colour, forest decline, fertilizers, France 2610
  - mesophyll, ultrastructure, frost resistance, Slovakia 7150
  - stomata, distribution, photosynthesis 2948
  - waxes, stomata, dry deposition 8841
- forest decline
  - dendrochronology
    - France, air pollution, climate 2091
    - Italy 8942
    - Switzerland, air pollution, climate 2091
  - fertilizers, France, plant nutrition, soil fertility 890
  - foliage, cuticle, permeability, Germany 2089
  - forest economics, Croatia 4719
  - forest inventories, Switzerland 4721
  - forest management, France 3822
  - genetic variation, Europe 6583
  - mountain forests, air pollution, France 3814

Abies alba *cont.*
- forest decline *cont.*
  - plant nutrition, aluminium, toxicity, France 4717
  - soil parent materials, geology, France 8943
- forest influences, nutrients, distribution, Sweden 7129
- forest plantations, cleaning, France 6932
- frost resistance, acclimatization, photosynthesis 1886
- fungal diseases, *Heterobasidion annosum*, Italy 608
- genetic variation
  - isoenzymes
    - outcrossing, Italy 5511
    - population genetics, Slovakia 8218
  - palaeoecology, Switzerland 7343
- ground vegetation, biomass, Slovakia 9946
- history, Italy 806
- increment 1007
  - geographical distribution, Poland 1009
- injuries, Switzerland 2093
- insect pests
  - *Argyresthia illuminatella*, Italy, life cycle 9156
  - *Dreyfusia nordmannianae*, Europe, biology 634
  - *Epinotia nigricana*, Italy 9155
  - Romania, control 9188
- mixed forests, increment, recruitment, mortality, Poland 2163
- mixtures, mountain forests, Germany 948
- molecular genetics, taxonomy 8227
- mycorrhizas, *Lactarius*, host specificity 5572
- natural regeneration, statistical analysis, Germany, spatial distribution 7774
- nutrient deficiencies
  - Germany 6314
  - magnesium, reviews 9732
- phenology, Slovakia 7144
- plant morphology, habit, taxonomy, Poland 1322
- plant succession, climatic change, Switzerland 8171
- planting stock, root pruning, root systems, Germany 6109
- pollen germination, air pollution, Slovakia 488
- protection forests, silviculture, France, mountain forests 5840
- riparian forests, Slovakia 519
- roots, biomass, Slovakia 6964
- seed set, air pollution, Slovakia 488
- selection system, Europe 912
- shoots, defoliation, forest decline, Germany 9865
- silvicultural conversion, mixtures, Austria 6940
- silvicultural systems, selection system, stand characteristics, Germany 6132
- silviculture, Germany, conferences 5940
- site types, vegetation types, Germany 4769
- soil fertility, silvicultural systems, France 9711
- stand characteristics
  - forest ecology, Italy 8667
  - plant competition, yield tables, simulation 6827
- stand density
  - basal area, Romania, allometry 8662
  - Germany 2687
- stems
  - snow damage, Italy 280
  - wind damage, Italy 280
- taxonomy, plant morphology, habit, Poland 2114
- thinning, pruning, Germany 9525

Abies alba *cont.*
- volume, increment, bark, Spain, equations 5961
- water stress, plant physiology, climate, France 4515
- wildlife, birds, Slovakia 10078
- wood anatomy, juvenile wood 2017

Abies amabilis
- clear felling, forest borders, USA, stand characteristics 1333
- climate, stand characteristics, population dynamics, simulation, Canada 7332
- dead wood, decomposition, USA 4497
- forest decline, volcanic ash, USA 1995
- forest litter
  - decomposition
    - hydrology, USA 7897
    - volcanic ash, USA 1098
- fungal diseases, *Heterobasidion annosum*, Canada 2263
- photosynthesis, light, acclimatization, USA 8930
- plant colonization, canopy gaps, Canada 542
- seedlings, light penetration, plant morphology, plant physiology, adaptation 6258
- soil organic matter, mixing, Canada, nutrients 6278
- understorey, volcanoes, USA, damage 539

Abies balsamea
- acid deposition, watersheds, USA, pH 352
- air pollution, mercury, deposition, Canada 8854
- birds, clear felling, Canada, buffer zones 4072
- boreal forests
  - forest health, monitoring, Canada 9866
  - site class assessment, Canada, site factors 9597
- cambium
  - IAA, biochemistry, seasonal variation 5403
  - molecular genetics 3127
- clear felling, watersheds, USA, pH 352
- coniferous forests, soil, acidification, USA 1170
- deer, *Odocoileus virginianus*, USA, browsing damage 3203
- embryo culture 1699
- essential oils, Canada, terpenoids 2972
- foliage
  - age, leaf area, USA 5370
  - air pollution, metals, Canada 8833
- increment, thinning, soil water regimes, USA 1774
- insect pests
  - *Choristoneura fumiferana*
    - biological control
      - bacterial insecticides 7507
      - Canada 7503
    - Canada
      - biological control 676
      - damage, stand structure 7536
      - dendrochronology 5702
    - feeding behaviour 2322
    - natural regeneration, USA 1487
    - stand development, Canada 1412
- insecticides, residues 7112
- lignification, enzyme activity 1275
- natural regeneration
  - density, Canada, sampling 2500
  - logging, Canada, microclimate 8623
- reproductive behaviour, Canada 478
- silvicultural systems, natural regeneration, Canada 8621
- site class assessment
  - Canada 1008
  - stand density, USA 1839
- stand structure, birds, insect pests, Canada, ecology 7536

Abies balsamea *cont.*
- thinning, Canada, planning 4353
- throughfall, acid deposition, USA, spatial variation 7657
- weed control
  - cleaning
    - USA 2650
      - growth 2651
- wildlife
  - birds, herbicides, Canada 5829
  - fertilizers, paper mill sludge, USA 4069

Abies borisii-regis
- silvicultural characters, provenance trials, France 833
- volume determination, estimation, Greece, cost analysis 8696

Abies bornmuelleriana, provenance trials, Christmas trees, Denmark 6945

Abies cephalonica, silvicultural characters, provenance trials, France 833

Abies concolor
- advance growth, increment, USA 152
- forest fires, soil chemistry, USA 2918
- fungal diseases
  - *Heterobasidion annosum*
    - USA 607
      - control 615
- genetic variation, wood anatomy, USA 5387
- ground vegetation, USA 6557
- increment, plant competition, growth models, USA 7675
- mycorrhizas, thinning, controlled burning, USA 3145
- population dynamics, increment, USA, equations 9962
- vegetation types, stand characteristics, USA 7281

Abies concolor × Abies grandis, tissue culture, micropropagation, chromosomes, variation 8191

Abies firma
- growth rings, wood chemistry, dendrochronology 7616
- secondary forests, plant succession, Japan, age structure 4325
- stemflow, pH, soil chemistry, acidification, Japan 1992

Abies fraseri
- air pollution
  - nitrogen, USA 6356
  - ozone
    - seedlings
      - gas exchange 2888
      - growth 2888
- Christmas trees
  - genetic variation
    - increment, USA 3125
    - quality, USA 3125
  - grading, prices, USA 9557
  - propagation 6144
  - pruning, USA 9556
  - tree breeding, early selection, USA 3126
- forest decline, USA 2888
- growth stress, Christmas trees, stems, splitting 3467
- insect pests
  - *Dreyfusia piceae*
    - genetic variation, USA 5686
    - water stress 5687
- provenance trials, Christmas trees, USA 4260
- seedlings, plant competition, altitude, USA 1895
- soil chemistry, nitrogen, foliage, chemistry, USA 3576

Abies grandis
- advance growth, liberation felling, USA 2627
- amenity and recreation areas, USA, hazards, analysis 8455
- enzymes, oleoresins 6495
- fertilizers, sewage sludge, nutrient deficiencies, USA 3406
- foliage, chemistry, chlorinated hydrocarbons, measurement 9334
- forest influences, nutrients, distribution, Sweden 7129

Abies grandis *cont.*
- forest plantations, plant competition, USA, survival 6922
- fungal diseases, *Heterobasidion annosum,* USA 607
- injuries
  - oleoresins, biosynthesis 6484
  - resins, terpenoids 452
- insect pests, *Choristoneura occidentalis,* sampling, biological control 5800
- mycorrhizas
  - host specificity 5603
  - rhizosphere, protozoa 5606
- plant succession, seral stages, increment, USA 4792
- resins, defence mechanisms, abietic acid, biosynthesis 8114
- shoots, structure, photosynthesis, light, carbon dioxide 8109
- stand characteristics, plant competition, yield tables, simulation 6827
- tissue culture, enzymes, isomerases 3399
- wildlife, *Thomomys talpoides,* USA, damage 6922
- wind damage, Netherlands 1062

Abies holophylla
- progeny testing, heritability, Korea Republic 8205
- pruning, Korea Republic, equipment, work study 8657
- seedlings, acid deposition, simulation, growth, damage 8834

Abies kawakamii, mycorrhizas, Taiwan 3158

Abies koreana, wood chemistry, lignans 1240

Abies lasiocarpa
- branches, growth rings, biomass, USA 2963
- cones, climate, increment, USA 2098
- decay, Canada, measurement, statistical analysis 4392
- dendroclimatology, increment, climate, USA 4990
- forest economics
  - nature conservation, simulation, USA 1870
  - silvicultural systems, simulation, USA 1870
- forest fires, natural regeneration, climate, USA 1416
- forest plantations, plant competition, USA, survival 6922
- insect pests
  - *Dryocoetes confusus*
    - Canada
      - aggregation pheromones 1489
      - chemical control 1489
  - *Orgyia pseudotsugata,* USA, damage 7459
- light, interception, plant morphology, USA 3733
- nitrogen cycle, water pollution, simulation, USA 3625
- plant nutrition, iron, waterlogging, USA 3638
- plant succession, seral stages, increment, USA 4792
- population dynamics, increment, USA, equations 9962
- shoots, structure, photosynthesis, light, carbon dioxide 8109
- squirrels, *Tamiasciurus hudsonicus,* USA, ecology 3207
- subalpine forests
  - dendrochronology, USA 3291
  - dendroclimatology, USA 4470
  - USA
    - disturbed land
      - human activity 9940
      - recovery 9940
- virgin forests, remote sensing, USA 1865
- wildlife
  - *Rangifer tarandus*
    - lichens
      - Canada 5809
      - USA 5809
  - *Thomomys talpoides,* USA, damage 6922

Abies magnifica
- fungal diseases
  - *Armillaria ostoyae,* thinning, USA 10008
  - *Heterobasidion annosum,* USA, control 615
- ground vegetation, USA 6557
- increment, plant competition, growth models, USA 7675
- mycorrhizas, thinning, controlled burning, USA 3145
- soil properties, USA 7918

Abies mariesii
- chloroplast genetics, clines, Japan 5497
- cones, production, diameter, Japan 4736
- foliage, chemistry, maltol 4670
- plant competition, stand structure, Japan, mixed forests 4798
- wood chemistry, lignans 3744

Abies mayriana, chemotaxonomy, foliage, monoterpenoids 3043

Abies nebrodensis, molecular genetics, taxonomy 8227

Abies nephrolepis, forest decline, Russia 8941

Abies nordmanniana
- provenance trials, Christmas trees, Denmark 6945
- soil, herbicides, residues, Denmark 8797

Abies pindrow
- cones, diameter, seeds, India 1678
- diameter, cones, seeds, India 3388
- natural regeneration, canopy, light, Pakistan 5465
- silvicultural systems, site class assessment, soil chemistry, India 2815
- site preparation, weed control, artificial regeneration, Pakistan 5132
- soil chemistry, humic acids, soil fertility, India 286
- treelines, India 1356
- vegetation types
  - biomass production, stand characteristics, India 6540
  - cycling, India 6541

Abies pinsapo
- cones, anatomy, phenology 3841
- pollen, viability, dispersal, reproductive behaviour, Spain 489
- stand characteristics, canopy gaps, forest ecology, Spain 9024
- wood chemistry, lignans, medicinal plants, cytotoxicity 5400

Abies procera
- fungal diseases
  - *Armillaria ostoyae,* thinning, USA 10008
  - *Phytophthora,* Christmas trees, USA 9097
- provenance trials, increment, climate, Canada 2549
- seed germination, seed treatment 73
- shoots, structure, photosynthesis, light, carbon dioxide 8109
- stand characteristics, plant competition, yield tables, simulation 6827

Abies religiosa
- forest management, nature conservation, rural economy, simulation, Mexico 3280
- fungal diseases
  - *Fomitopsis pinicola,* Mexico 7397
  - *Heterobasidion annosum,* Mexico 7397

Abies sachalinensis
- bark, chemistry, extractives 1247
- chemotaxonomy, foliage, monoterpenoids 3043
- clones, heritability, Japan, wood properties 7118
- essential oils, foliage, Japan, seasonal variation 6445
- insect pests, *Cinara todocola,* forest plantations, Japan, spacing 633
- mixtures, growth models, Japan 2700
- plant morphology, computer techniques 1624
- progeny testing, early selection 8211
- selective felling, natural regeneration, stand development, Japan, logging effects 6910

Abies sachalinensis cont.
- stand structure
  - canopy gaps, understorey, Japan, growth 8659
  - natural regeneration, Japan 2168
- thinning, slopes, geographical information systems, Japan, planning 6934
- wood anatomy
  - cell differentiation, tracheids 6411
  - tracheids, microtubules, cellulose 400
  - wood properties 7153
- wood properties, Japan, tree breeding 2032

Abies sibirica
- boreal forests, natural regeneration, Russia, simulation, management 9965
- foliage, optical properties, remote sensing 1256
- fungal diseases, Deuteromycotina, disease vectors, *Monochamus urussovii* 10046
- insect pests, *Monochamus urussovii,* disease vectors, Deuteromycotina 10046
- wood properties, growth effects, Russia 9756

Abies spectabilis, cloud forests, synecology, altitude, land use, Nepal 1371

Abies veitchii
- plant competition, stand structure, Japan, mixed forests 4798
- soil air, carbon dioxide, snow cover, Japan 8768
- subalpine forests, ice damage, Japan 9673

Abietoideae, wood anatomy, identification 8066

Abiotic injuries
- amenity trees, UK, books 6
- forest trees
  - air pollution, plant physiology 1154
  - Canada, books 7633

Abscission
- *Betula tortuosa,* plant nutrition, resorption, Sweden 6482
- broadleaves, reproductive behaviour, phenology, India 388

Abutilon indica, air pollution, foliage, damage, India 5328

Acacia
- agroforestry, choice of species, Australia, arid zones, subtropics 3369
- farm forestry, choice of species, direct sowing, Australia 10121
- forest fires, forest ecology, simulation 2920
- forest plantations
  - degraded land, reclamation, Philippines 8624
  - sand dune stabilization, Senegal 4939
- palaeoecology, Australia 3885
- phenology, climate, site factors, soil water, Australia 3707
- provenance trials, China 5941
- reclamation, mined land, Venezuela 6711
- root nodules
  - *Bradyrhizobium*
    - inoculation 2236
    - taxonomy, research 7389
  - *Rhizobium*
    - inoculation 2236
    - taxonomy, research 7389
- savannas, ecotones, soil chemistry, Australia 3087
- seed banks, Africa South of Sahara 3962
- seeds, amino acids, chemotaxonomy, evolution 9979
- shade trees, density, canes and rattans, *Calamus manan,* Indonesia 1802
- shifting cultivation, nitrogen cycle, Sahel, simulation 8429
- species trials
  - acid soils, tolerance, methodology 7718
  - Cape Verde 1667
  - China 5941
  - coppicing, Malawi 1670
  - reclamation, mine spoil, India 4949
  - saline soils, reclamation, Pakistan 6014

Acacia cont.
- stomata, genetic variation, taxonomy 4648
- taxonomy
  - Latin America 4745
  - new taxa, Australia 3857-3858
- tree breeding, South Africa 8190
- vegetation types
  - Morocco 9921
  - remote sensing, image processing, Australia 2763
- weed control, controlled burning, grasslands, Uganda 5362

Acacia abyssinica, mycorrhizas, nitrogen fixation, forest nurseries, Ethiopia 1446

Acacia adunca, taxonomy, Australia 5431

Acacia albida (*see Faidherbia albida)*

Acacia ampliceps
- root nodules
  - *Bradyrhizobium,* salt tolerance, seedling growth, nitrogen fixation 6620
  - *Rhizobium,* salt tolerance, seedling growth, nitrogen fixation 6620
- species trials, fuelwood, India 1661

Acacia aneura, woodlands, landscape, soil chemistry, Australia 9002

Acacia ataxacantha, seed set, Senegal 3842

Acacia aulacocarpa, foliage, chemistry, Australia 7081

Acacia auriculiformis
- afforestation, reclaimed land, Singapore 4095
- allelopathy, foliage, extracts 3106
- biology, utilization, multipurpose trees, research, Tropics 185
- biomass production, soil chemistry, plant composition, India 2699
- bud culture 9451
- forest litter, decomposition, soil organic matter, Congo 1912
- forest plantations
  - biomass production, Congo, plant composition, major elements 6980
  - degraded land, reclamation, Philippines 8624
  - forest influences, soil chemistry, lateritic soils, India 8023
  - weight tables, Bangladesh 1001
- fuelwood, India, calorific value 3361
- genetic variation, population genetics, Zaire 2208
- genetics, karyotypes 588
- insect pests, *Acizzia,* Philippines, damage 2310
- isoenzymes, sampling, methodology, techniques 1612
- nitrogen fertilizers, nutrient allocation, Côte d'Ivoire 3408
- provenance trials
  - data processing, statistical analysis, South East Asia 29
  - forest nurseries, India 1669
  - India 1672
  - Peninsular Malaysia 9420
  - South East Asia 6867
    - plant morphology, growth 5050
- reclamation
  - eroded soils, community forestry, choice of species, Indonesia 3237
  - mine spoil, lateritic soils, India 10092
  - mined land, species trials, India 3246
- root nodules
  - *Bradyrhizobium,* IAA 5589
  - *Rhizobium,* seed germination, seedling growth 8255
- seed germination
  - seed treatment 1681
    - India 858
- seedling growth
  - symbiosis
    - *Bradyrhizobium japonicum,* nitrogen fixation 3151
    - *Rhizobium,* nitrogen fixation 3151
  - water stress, Nigeria 1946
- seedlings, plant nutrition, nutrient uptake, pot experimentation 1945
- shoot cuttings, plant growth regulators, IBA, roots 7736

Acacia auriculiformis cont.
- silvicultural systems, USA, growth 6090
- social forestry, development projects, India 8437
- species trials
  - agroforestry, acid soils, Cameroon 2542
  - fuel plantations, Nepal 6865
  - Puerto Rico 1666
  - reclamation
    - mine spoil, India 2404
    - mined land, Peninsular Malaysia 3240
  - Sri Lanka 5054
  - Zaire 8566
- tissue culture
  - explants, culture media 865
  - techniques 4285
- tree breeding, Sabah 9984
- vesicular arbuscular mycorrhizas, *Glomus,* plant nutrition, growth 2233

Acacia auriculiformis × Acacia mangium, genetics, karyotypes 588

Acacia berlandieri
- browse, foliage, chemistry, USA 9823
- seed dormancy, Arid Regions 7323
- soil surveys, matorral, Mexico 301

Acacia bivenosa, defoliation, seasonal variation, soil salinity, wind damage, Cape Verde 1883

Acacia boormani, seed germination, seed treatment 2561

Acacia brevispica, woodlands, synecology, ecotones, Kenya 5443

Acacia browniana, seed germination, temperature 76

Acacia caffra, growth rings, wood anatomy, Africa, rain 396

Acacia catechu
- branching, habit, India 2037
- deciduous forests, synecology, remote sensing, India 9638
- insect pests, Pakistan, seeds 5679
- multipurpose trees, monographs 6771
- reclamation, degraded forests, India 9249
- root nodules, *Rhizobium,* seed germination, seedling growth 8255
- seed germination, seed treatment, India 858
- species trials
  - fuel plantations, Nepal 6865
  - reclamation, mine spoil, India 2404

Acacia caven, agroforestry, savannas, Chile 5878

Acacia celastrifolia, seed germination, temperature 76

Acacia concinna, seed testing, viability 1677

Acacia crassicarpa
- forest plantations, weeds, damage, Indonesia 1755
- species trials, Sri Lanka 5054

Acacia cupressiformis, species trials, provenance trials, seed germination, India 8564

Acacia cyanophylla (*see Acacia saligna)*

Acacia cyclops
- woody weeds
  - cycling, South Africa 6319
  - seedling growth, soil fertility, South Africa 2646

Acacia dealbata, gums, chemistry, marsupials, Australia 2978

Acacia drummondii, seed germination, temperature 76

Acacia dudgeoni, taxonomy, Senegal 9981

Acacia ehrenbergiana, sustainability, Egypt, charcoal 3913

Acacia elata, agroforestry, species trials, Rwanda 4961

Acacia erioloba
- growth rings, wood anatomy, Africa, rain 396
- mammals, leopards, South Africa 3206

Acacia erubescens
- canopy
  - woodland grasslands
    - ground vegetation, South Africa 359
    - soil fertility, South Africa 359

- ***Acacia etbaica,*** woodlands, synecology, ecotones, Kenya 5443
- ***Acacia farnesiana***
  - insect pests, *Caryedon serratus,* chemical control 5781
  - precipitation, canopy, Mexico, simulation 2398
  - seed dormancy, temperature, moisture, Mexico 2575
  - seed germination, seed treatment 85
- ***Acacia fleckii,*** growth rings, wood anatomy, Africa, rain 396
- ***Acacia frigescens,*** gums, chemistry, marsupials, Australia 2978
- ***Acacia galpinii,*** growth rings, wood anatomy, Africa, rain 396
- ***Acacia gerrardii***
  - growth rings, wood anatomy, Africa, rain 396
  - insect pests, Bruchidae, seeds, seed germination, establishment 6657
  - reclamation, fly ash, Zimbabwe 7564
  - woodlands, synecology, ecotones, Kenya 5443
- ***Acacia goetzei,*** growth rings, wood anatomy, Africa, rain 396
- ***Acacia gourmensis,*** taxonomy, Senegal 9981
- ***Acacia greggii,*** reclamation, planting stock, protection, USA 6712
- ***Acacia haematoxylon,*** mammals, leopards, South Africa 3206
- ***Acacia hemignosta,*** species trials, fuelwood, India 1661
- ***Acacia heteracantha,*** chromosome number, variation 9051
- ***Acacia heterophylla,*** genetics, Réunion 4840
- ***Acacia holosericea***
  - defoliation, seasonal variation, soil salinity, wind damage, Cape Verde 1883
  - fungal diseases
    - *Fusarium oxysporum,* India 2251
    - *Glomerella cingulata,* India 2251
  - root nodules, *Rhizobium,* seed inoculation, growing media 2237
  - seed treatment, seed inoculation, *Rhizobium,* seedling growth 1682
- ***Acacia horrida***
  - seedling growth, sowing depth, temperature, drought resistance 4312
  - water harvesting, savanna woodlands, rehabilitation, Kenya 6120
- ***Acacia implexa,*** seed germination, seed treatment 2561
- ***Acacia jacquemontii,*** species trials, provenance trials, seed germination, India 8564
- ***Acacia karroo***
  - chromosome number, variation 9051
  - forest influences, soil fertility, savannas, Zimbabwe 6369
  - growth rings, wood anatomy, calcium oxalate, crystals 396
  - savannas, seed predation, South Africa, rodents 4068
  - wood chemistry, chemotaxonomy, flavonoids 9835
- ***Acacia kybeanensis,*** seed germination, seed treatment 2561
- ***Acacia laeta,*** taxonomy, Senegal 9981
- ***Acacia lateriticola,*** seed germination, temperature 76
- ***Acacia leptocarpa,*** forest plantations, weeds, damage, Indonesia 1755
- ***Acacia leucophloea***
  - seeds, edible species, plant composition 2061
  - vegetation, reclamation, sodic soils, India 712
- ***Acacia ligulata***
  - forest nurseries, irrigation, seedling growth, Jordan 7767
  - seed banks, Australia 7324
- ***Acacia linearifolia,*** taxonomy, Australia 5431
- ***Acacia loderi,*** seed banks, Australia 7324
- ***Acacia longifolia***
  - insect pests
    - *Acizzia uncatoides,* USA, biological control 7509
    - *Forficula auricularia,* Italy, damage, natural enemies 2369
- ***Acacia longifolia*** *cont.*
  - woody weeds
    - biological control, South Africa 8640
    - control, South Africa 8646
    - South Africa, control 169
- ***Acacia mabellae,*** roots, soil physics, plant competition, Australia 3059
- ***Acacia maconochieana,*** species trials, fuelwood, India 1661
- ***Acacia macracantha,*** seed dormancy, temperature, moisture, Mexico 2575
- ***Acacia mangium***
  - afforestation
    - pastures, Costa Rica, stem form, growth 5051
    - site preparation, fertilizers, Indonesia 7781
  - biology, utilization, multipurpose trees, research, Tropics 185
  - biomass production, soil chemistry, plant composition, India 2699
  - forest influences, hydrology, watersheds, Sabah 2908-2909
  - forest litter, decomposition, soil organic matter, Congo 1912
  - forest nurseries
    - growing media
      - Dominican Republic 6088
      - sowing depth, India 9470
  - forest plantations
    - biomass production
      - Congo, plant composition, major elements 6980
      - equations, weight tables, Bangladesh 6975
    - grasslands, forest fires, Indonesia 1996
    - increment, Sabah 1748
    - volume tables, volume determination, equations, Bangladesh 6173
    - weeds, damage, Indonesia 1755
  - genetic resources, Central America 1438
  - genetic variation, population genetics, Zaire 2208
  - genetics, karyotypes 588
  - growth models, Indonesia 1831
  - insect pests
    - *Acizzia,* Philippines, damage 2310
    - Philippines 3185
  - isoenzymes, sampling, methodology, techniques 1612
  - nitrogen fertilizers, nutrient allocation, Côte d'Ivoire 3408
  - nitrogen fixation, *Bradyrhizobium,* plant physiology 598
  - planting stock, survival, growth, plant growth regulators, treatment 445
  - progeny testing, inheritance, Indonesia 2205
  - protoplast culture, techniques 6886
  - provenance trials
    - Indonesia 6026
    - Philippines, disease resistance, pest resistance, survival 6016
  - reclamation
    - degraded forests, development, Indonesia 7560
    - mined land, species trials, agroforestry, Peninsular Malaysia 3241
  - root nodules
    - *Bradyrhizobium*
      - morphology, soil chemistry 6612
      - soil properties, Côte d'Ivoire, growth 9069
    - *Rhizobium,* soil properties, Côte d'Ivoire, growth 9069
  - seedling growth
    - nitrogen fixation, plant nutrition, phosphorus, provenance 6313
    - plant water relations, plant growth regulators 445
  - shoot cuttings 3404
    - plant growth regulators, IBA, roots 7736
  - site class assessment, equations, Indonesia 1829
  - soil, *Shorea,* seedling growth, allelopathy, Indonesia 2159
- ***Acacia mangium*** *cont.*
  - species trials
    - agroforestry, acid soils, Cameroon 2542
    - reclamation, mined land, Peninsular Malaysia 3240
    - Sri Lanka 5054
    - Zaire 8566
  - symbiosis, Africa, conferences, research 6807
  - tree breeding, Sabah 9984
  - vesicular arbuscular mycorrhizas, *Glomus,* plant nutrition, growth 2233
- ***Acacia mangium × Acacia auriculiformis,*** vegetative propagation, handbooks 2600
- ***Acacia mearnsii***
  - bark, chemistry, tannins 5389
  - farm forestry, economics, Tanzania 3251
  - forest plantations, soil biology, plant parasitic nematodes, surveys 669
  - provenance trials
    - China 5941
    - increment, China 9058
  - short rotation forestry, biomass production, India 1736
  - site class assessment, soil depth, South Africa, statistical analysis 1002
  - species trials, China 5941
- ***Acacia melanoxylon***
  - allelopathy, plant composition, forest litter, Spain 7315
  - forest litter, decomposition, Spain, phytotoxicity 7313
  - forest nurseries, herbicides, tolerance 8598
  - forest plantations
    - New Zealand 5992
    - protection, natural regeneration, India 4811
  - genetics, Réunion 4840
  - seed germination, temperature 76
  - seedlings, plant competition, pot experimentation 3867
  - vesicular arbuscular mycorrhizas, *Glomus,* plant nutrition, growth 2233
- ***Acacia mellifera***
  - allelopathy, crops 545
  - fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
  - taxonomy, Senegal 9981
  - woodlands, synecology, ecotones, Kenya 5443
- ***Acacia modesta,*** seed germination, fumigants, phostoxin, phytotoxicity 5781
- ***Acacia mollissima*** *(see Acacia mearnsii)*
- ***Acacia myrtifolia,*** seed germination, seed treatment 2561
- ***Acacia nigrescens,*** growth rings, wood anatomy, calcium oxalate, crystals 396
- ***Acacia nilotica***
  - agroforestry, India 10107
  - allelopathy, agroforestry, India 7316
  - biofertilizers, *Rhizobium,* forest nurseries, India 142
  - branching, habit, India 2037
  - browsing damage, foliage, plant morphology, South Africa 5808
  - foliage, chemistry, genetic variation, provenance, India 3141
  - forest influences, soil fertility, savannas, Zimbabwe 6369
  - forest litter, India 3582
  - forest nurseries, irrigation, waste water, Niger 9473
  - forest plantations, lopping, increment, India 1798
  - fruits, production, fodder, Ethiopia 2670
  - fuel plantations
    - diameter, India, equations 1615
    - height, India, equations 1615
  - fuelwood, India, calorific value 3361
  - fungal diseases
    - *Cochliobolus lunatus,* forest nurseries, India 9085
    - Tropics, damage 10031
  - genetic variation, isoenzymes, population genetics, Kenya 5550

- ***Acacia nilotica*** *cont.*
  - growth rings, wood anatomy, calcium oxalate, crystals 396
  - insect pests
    - *Caryedon serratus,* chemical control 5781
    - *Hypolixus truncatulus,* India 4042
    - India, biological control 5806
    - Tropics, damage 10031
  - multipurpose trees 2007
  - mycorrhizas
    - *Gigaspora,* seedling growth, root nodules, nitrogen-phosphorus fertilizers 7385
    - *Glomus*
      - seedling growth
        - India 3153
        - root nodules, nitrogen-phosphorus fertilizers 7385
    - *Laccaria fraterna,* seedling growth 8267
    - nitrogen fixation, forest nurseries, Ethiopia 1446
    - *Pisolithus tinctorius,* seedling growth 8267
  - nitrogen fixation, genetic variation 5561
  - nitrogen-phosphorus fertilizers, seedling growth, mycorrhizas, root nodules 7385
  - pollination, insects, Senegal 3842
  - provenance trials, genetic variation, India 9414
  - reclamation, waste land, soil water, infiltration, India 8397
  - root nodules
    - *Rhizobium*
      - salt tolerance 8268
      - seedling growth, mycorrhizas, nitrogen-phosphorus fertilizers 7385
  - seed germination
    - seed treatment 85
      - India 858
  - seed set, Senegal 3842
  - seedlings, salt tolerance, growth, plant physiology 6469
  - shelterbelts, species trials, soil properties, India 3689
  - species trials
    - mangrove forests, Bangladesh 6017
    - provenance trials, seed germination, India 8564
    - reclamation
      - fly ash, India 9248
      - mine spoil, India 2404
      - sodic soils, India 712
  - street trees, air pollution, dust, damage, Pakistan 4550
  - water harvesting, savanna woodlands, rehabilitation, Kenya 6120
  - woodlands, synecology, ecotones, Kenya 5443
  - woody weeds, biological control, insects 7789
- ***Acacia nubica,*** seedling growth, sowing depth, temperature, drought resistance 4312
- ***Acacia nyssophylla***
  - mistletoes
    - *Amyema preissii,* host parasite relationships, seed germination, seedling growth 5674
    - *Lysiana exocarpi,* host parasite relationships, seed germination, seedling growth 5674
- ***Acacia obliquinervia,*** gums, chemistry, marsupials, Australia 2978
- ***Acacia oswaldii***
  - forest nurseries, irrigation, seedling growth, Jordan 7767
  - rabbits, *Oryctolagus cuniculus,* natural regeneration, Australia 4928
  - seed banks, Australia 7324
- ***Acacia polyacantha***
  - seed germination, seedling growth, soil chemistry, carbon, Zambia 5239
  - seed set, Senegal 3842
- ***Acacia raddiana***
  - chromosome number, variation 9051
  - nitrogen fixation, estimation, isotope dilution, pot experimentation 9725
- ***Acacia raddiana*** *cont.*
  - sustainability, Egypt, charcoal 3913
  - symbiosis, Africa, conferences, research 6807
- ***Acacia reficiens***
  - irrigated stands, biomass, equations, Kenya 5960
  - synecology, site factors, variation, Arid Regions, Kenya 8153
  - vegetation types, climate, landscape, Kenya 2156
- ***Acacia rehmanniana,*** growth rings, wood anatomy, calcium oxalate, crystals 396
- ***Acacia rigidula,*** soil surveys, matorral, Mexico 301
- ***Acacia robusta,*** growth rings, wood anatomy, calcium oxalate, crystals 396
- ***Acacia rubida,*** seed germination, seed treatment 2561
- ***Acacia salicina,*** seed germination, seed treatment 85
- ***Acacia saligna***
  - fertilizers, increment, Algeria 900
  - insect pests, Diaspididae, simulation, Israel, parasites 7443
  - multipurpose trees 1204
  - planting, irrigation, saline water, Spain 160
  - seed germination, seed treatment 85
  - species trials, reclamation, desert soils, Egypt 3372
  - woody weeds
    - cycling, South Africa 6319
    - seedling growth, soil fertility, South Africa 2646
    - South Africa, control 169
- ***Acacia senegal***
  - agroforestry, nitrogen cycle, Arid Regions, simulation 4118
  - fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
  - genetic improvement, Sudan 3992
  - gums, Africa, production, economics 8675
  - insect pests, Sudan 7428
  - nitrogen fixation, estimation, isotope dilution, pot experimentation 9725
  - pollination, insects, Senegal 3842
  - provenance, genetic variation, isoenzymes, Senegal 9981
  - seed germination, seed treatment 9436
  - seed set, Senegal 3842
  - seedling growth
    - symbiosis
      - *Bradyrhizobium japonicum,* nitrogen fixation 3151
      - *Rhizobium,* nitrogen fixation 3151
  - seedlings, root nodules, *Rhizobium,* arid soils, India 2234
  - symbiosis, Africa, conferences, research 6807
  - synecology, site factors, variation, Arid Regions, Kenya 8153
  - taxonomy, Senegal 9981
  - vegetation types, climate, landscape, Kenya 2156
- ***Acacia seyal***
  - genetic resources, conservation, Tanzania, techniques 8236
  - insect pests, Sudan 7428
  - nitrogen fixation, estimation, isotope dilution, pot experimentation 9725
  - seed germination, seed treatment 85
  - seedling growth, sowing depth, temperature, drought resistance 4312
- ***Acacia sieberiana***
  - genetic resources, conservation, Tanzania, techniques 8236
  - insect pests, Bruchidae, seeds, seed germination, establishment 6657
  - mycorrhizas, nitrogen fixation, forest nurseries, Ethiopia 1446
  - species trials, India 832
- ***Acacia smallii,*** grazing, simulation, plant competition, pot experimentation 7255
- ***Acacia spirocarpa,*** chromosome number, variation 9051
- ***Acacia stenophylla***
  - forest nurseries, irrigation, seedling growth, Jordan 7767
- ***Acacia stenophylla*** *cont.*
  - species trials, fuelwood, India 1661
- ***Acacia suaveolens,*** seed germination, forest fires, soil temperature, Australia 8036
- ***Acacia terminalis***
  - seed dispersal, Formicidae, Australia 484
  - seed germination, seed treatment 2561
- ***Acacia tomentosa,*** species trials, provenance trials, seed germination, India 8564
- ***Acacia tortilis***
  - agroforestry, India 3274
  - browse, indigenous knowledge, Kenya 6669
  - browsing damage, foliage, plant morphology, South Africa 5808
  - canopy, forest influences, Kenya, understorey, grasslands 4601
  - chromosome number, variation 9051
  - foliage, extracts, *Prosopis cineraria,* seedling growth, allelopathy 2161
  - fruits, production, fodder, Ethiopia 2670
  - fuelwood, India, calorific value 3361
  - growth rings, wood anatomy, calcium oxalate, crystals 396
  - insect pests
    - *Bruchidius andrewesi*
      - India
        - fruits 5734
        - seeds 5734
    - *Caryedon serratus,* Pakistan, seeds 5679
  - interplanting, *Prosopis cineraria,* growth, India 2161
  - micropropagation, in vitro culture, techniques 5070
  - pollination, insects, Senegal 3842
  - reproductive behaviour, Senegal 3842
  - savanna woodlands, shelterbelts, Tanzania 4946
  - savannas, seed predation, South Africa, rodents 4068
  - seed germination
    - fumigants, phostoxin, phytotoxicity 5781
    - seed treatment 85
  - seed set, Senegal 3842
  - seedlings, root nodules, *Rhizobium,* arid soils, India 2234
  - shelterbelts, species trials, soil properties, India 3689
  - stand structure, forest influences, soil chemistry, Sudan 4598
  - sustainability, Egypt, charcoal 3913
  - synecology, site factors, variation, Arid Regions, Kenya 8153
  - vegetation types
    - climate, landscape, Kenya 2156
    - synecology, soil properties, deserts, Saudi Arabia 8162
  - water harvesting, savanna woodlands, rehabilitation, Kenya 6120
  - wildlife, *Aepyceros melampus,* natural regeneration, Tanzania 4065
- ***Acacia urophylla,*** seed germination, temperature 76
- ***Acacia victoriae***
  - forest nurseries, irrigation, seedling growth, Jordan 7767
  - species trials, fuelwood, India 1661
  - stand development, population dynamics, Australia, simulation 3955
- ***Acacia welwitschii,*** growth rings, wood anatomy, calcium oxalate, crystals 396
- ***Acacia xanthophloea***
  - allelopathy, multipurpose trees, crops 8176
  - growth rings, wood anatomy, calcium oxalate, crystals 396
- ***Acacia zanzibarica***
  - irrigated stands, biomass, equations, Kenya 5960
  - water harvesting, savanna woodlands, rehabilitation, Kenya 6120
- **Acanthaceae**
  - fruits, India 503
  - seeds, India 503
- ***Acanthocinus aedilis,*** insect pests, *Pinus sylvestris,* Sweden, interactions, *Thanasimus formicarius* 7485
- ***Acanthocinus griseus,*** insect pests, *Pinus,* Japan, biology 6655

Acantholyda erythrocephala, insect pests, *Pinus,* Canada, control 678
Acantholyda posticalis, insect pests, *Pinus sylvestris,* Poland, chemical control 7499
Acanthopanax sciadophylloides
  crown, Japan, branches, development, morphology 9795
  in vitro culture, bud culture 3393
  wood anatomy, growth effects 4582
Acanthus ilicifolius, mangrove forests, remote sensing, synecology, India 6996
Acari, woody plants, foliage, morphology, Australia 621
Acaulospora, mycorrhizas, Fabaceae, India, surveys 3152
Acaulospora appendicula, mycorrhizas, *Cordia alliodora,* seedling growth 1444
Acaulospora excavata, mycorrhizas, *Terminalia,* Côte d'Ivoire 600
Acaulospora foveata, mycorrhizas, *Cordia alliodora,* seedling growth 1444
Acaulospora laevis
  mycorrhizas
    Calamus manan, planting stock, Malaysia 975
    Casuarina equisetifolia, seedling growth 4851
    Leucaena leucocephala, seedling growth 1442
Accident prevention, private forestry, Sweden 8550
Accidents (*see also* Safety)
  Germany, statistics, training 823
Acclimatization
  broadleaves, frost resistance, photosynthesis 1886
  conifers, frost resistance, photosynthesis 1886
  forest trees, photosynthesis, carbon dioxide enrichment 1283
  Picea glauca × *Picea engelmannii,* seedlings, plant composition, proteins 3565
  Pinus sylvestris, frost resistance, measurement 3013
Acer
  agroforestry, afforestation, fields, France, research 7580
  forest litter
    decomposition, Germany 1915
    soil organic matter, USA, nitrogen, mineralization 5254
  fungal diseases, *Nectria cinnabarina,* USA, chemical control, testing 2293
  plant parasitic nematodes, *Meloidogyne,* USA, resistance 3189
  salamanders, clear felling, USA, population dynamics 3195
  soil biology, algae, Ukraine, forest steppe 1106
  urban forestry, amenity trees, Germany 2432
  wind damage, Netherlands 1062
  wood properties, wood anatomy, methodology, boring 2494
Acer amoenum, insect pests, *Periphyllus californiensis,* Japan, development, growth 4880
Acer campestre, seed germination, seed treatment 2562
Acer cappadocicum, mountain forests, cycling, India 3633
Acer circinatum, soil water, measurement, time domain reflectometry, USA 9688
Acer freemanii
  cultivars, foliage, plant anatomy, plant morphology 8458
  ornamental woody plants, shoot cuttings 10150
Acer ginnala, shoot cuttings, landscape, Canada 6041
Acer grandidentatum
  birds, USA, ecology 690
  plant water relations, precipitation, USA 6303
Acer insigne, silvicultural characters, Iran, species trials, France 7147
Acer macrophyllum
  control, forest plantations, USA 4349
Acer macrophyllum *cont.*
  fungal diseases, Canada, mycoherbicides 8254
  plant competition, USA, *Pseudotsuga menziesii,* increment 5140
  woody weeds, herbicides, USA, statistical analysis 9515
Acer mono
  crown, canopy, plant morphology 8065
  seedlings, phenology, carbon dioxide enrichment, temperature, soil fertility 7864
Acer negundo
  insect pests, *Eulecanium transvittatum,* Turkey 7435
  plant morphology, habit, taxonomy, Poland 1207
Acer nigrum
  irrigation, seedling growth 6929
  pollen, development 2018
Acer oblongum, seed germination, seed treatment, temperature 81
Acer palmatum, wind damage, salt spray, damage, testing 8850
Acer pensylvanicum
  biomass, equations, allometry, USA 4195
  canopy gaps
    USA
      growth, survival 7868
      morphology, growth 4800
  carbon dioxide enrichment
    heat stress, plant nutrition, interactions 3547
    light, plant succession, USA 3099
  plant succession, plant colonization, wind damage, USA 277
  soil chemistry, nitrogen, foliage, chemistry, USA 3576
Acer platanoides
  foliage
    colour, pigments, senescence 5410
    optical properties 7032
      chlorophyll 2996
      plant water relations 1109
  forest litter, cycling, Sweden 2820
  frost resistance, Canada 6250
  insects, Lepidoptera, Finland, food plants 2299
  mixed forests, natural regeneration, synecology, Poland 8179
  photosynthesis
    light, foliage, zeaxanthin 2085
    photoinhibition, pigments 2075
  plant growth regulators, USA, biomass, growth 3781
  plant morphology, habit, taxonomy, Poland 1207
  planting stock, storage, plant water relations, desiccation 6073
  recalcitrant seeds, chemistry, proteins 3832
  rights of way, USA, control, plant growth regulators 941
  seed germination, seed treatment, storage 850
  seeds
    accelerated aging, storage, viability, enzymes 842
    imbibition, storage, enzymes, phospholipase D 2067
    mechanical properties, testing 405
    viability, accelerated aging, superoxide dismutase 7180
  soil pH, soil organic matter, Sweden 2816
  street trees
    light, USA 8459
    pruning, USA, wood residues 4983
  ungulates, forest management, national parks, Poland 4058
Acer pseudoplatanus
  agroforestry
    Corsica 5883
    sheep, birds, ecology, UK 6725
  air pollution
    forest litter, UK, decomposition 4572
    plant water relations 7090
  artificial regeneration, protection forests, Germany 7552
  biochemistry
    enzymes, tonoplast 3764
Acer pseudoplatanus *cont.*
  biochemistry *cont.*
    plasma membranes, transport 3763
    proton pump, regulation 6499
  cell culture
    enzymes, peroxidases 3775
    plant physiology, energy metabolism 9845
    respiration, nutrient deficiencies, iron 461
  choice of species
    nature conservation, UK, reviews 10125
    protection forests, avalanches, Germany 6869
  ethylene production
    cell culture 8104
    plant growth regulators, cell culture 7179
  foliage, nitrogen, nutrient allocation, UK 1944
  forest decline, France 3817
  forest litter, decomposition, carbon dioxide enrichment, laboratory tests 5255
  forest nurseries, herbicides, UK, tolerance 2644
  forest plantations, pastures, establishment, trials, France 5880
  fungal diseases
    defence mechanisms, nuclear magnetic resonance imaging 5011
    foliage, Germany 7405
  Golgi apparatus, plant physiology 454
  insect pests
    Cameraria ohridella, Austria 9158
    Drepanosiphum platanoidis, population genetics 5696
    Pulvinaria regalis, UK, biology 5697
  metabolism, carotenoids, iron, deficiency 6472
  mixed forests, increment, recruitment, mortality, Poland 2163
  mixtures, mountain forests, Germany 948
  molecular genetics, enzymes, laccase 8249
  natural regeneration
    seed production, seed predation, UK 3031
    statistical analysis, Germany, spatial distribution 7774
  nitrogen, roots, growth, development 6897
  plant morphology, habit, taxonomy, Poland 1207, 1322
  plant nutrition
    nitrogen
      seedlings 2857
      simulation 3637
  plant parasitic nematodes, *Meloidogyne,* USA, resistance 3189
  recalcitrant seeds, chemistry, proteins 3832
  reclamation
    landfills, species trials, plant nutrition, UK 4948
    mine spoil, UK, soil amendments 6708
  rhizosphere, soil biology, enzymes, root systems, UK 5274
  salt tolerance, enzymes, pyrophosphatases, cell cultures 1286
  seed germination, seed treatment, storage 850
  silvicultural conversion, mixtures, Austria 6940
  street trees, tree injection, nutrients, soil air, UK 10143
  taxonomy, plant morphology, habit, Poland 2114
  woodlands, soil pollution, heavy metals, UK 8855
Acer rubrum
  air pollution
    mercury, foliage, gas exchange 8852
    radionuclides, canopy, interception, pot experimentation 8844
  bacterial diseases
    Actinomyces 2289
    Bacillus 2289

Acer rubrum *cont.*
- bacterial diseases *cont.*
  - *Xylella fastidiosa,* USA 8314
- bottomland forests, dead trees, USA, birds, feeding behaviour 6680
- browsing damage, seedling growth, light, USA 1520
- canopy gaps
  - USA
    - growth, survival 7868
    - morphology, growth 4800
- carbon dioxide enrichment, light, plant succession, USA 3099
- container grown plants, irrigation, USA 6756
- control, woody weeds, herbicides, USA 1767
- coppice, cutting date, biomass production, Canada 923
- cultivars
  - foliage, plant anatomy, plant morphology 8458
  - tissue culture, vegetative propagation, growth, plant physiology 7734
- deciduous forests
  - gas exchange, USA, simulation 3328
  - natural regeneration, seed banks, Canada 3119
- energy relations, Canada, measurement, techniques 6262
- foliage
  - crown, light intensity, plant morphology, development 2014
  - ozone, deposition 1171
  - stand characteristics, browse, nutritive value 3196
- forest litter, decomposition, USA 3584, 9703
- forests, remote sensing, radar, backscatter, simulation 7677
- frost resistance, climate, simulation, USA 800
- herbicides, triclopyr, uptake, water stress 9512
- increment, height, understorey, USA 3963
- insect pests
  - *Corthylus punctatissimus,* USA 5743
  - USA, canopy gaps, phenolic compounds 2306
- irrigation, leachates, plant physiology, Canada 1753
- light, soil water, increment, USA 5181
- natural regeneration, logging, Canada, microclimate 8623
- nitrogen cycle, air pollution, nitrogen retention, USA 326
- ornamental woody plants, shoot cuttings 10150
- plant colonization, old fields, USA 3951
- plant growth regulators, USA, biomass, growth 3781
- plant morphology, habit, taxonomy, Poland 1207
- plant physiology, drought, USA, plant ecological groups 8813
- plant water relations, water flow resistance 2843
- seed dormancy, genetic variation, USA 7725
- seedlings, plant competition, old fields, USA 7308
- seeds, plant succession, USA 3029
- shade trees, USA, evaluation 8457
- soil amendments, lime, seed banks, USA 6898
- stems, mechanics 9797
- streams, forest litter, decomposition, USA 8781
- street trees, planting, water uptake 4510
- volume determination, taper, estimation, USA 4382
- water stress, genotype environment interaction, adaptation, USA 2206
- weed control
  - herbicides
    - USA 942
      - equipment 4345
- wetlands
  - USA, *Clethra alnifolia,* regeneration 5453

Acer rubrum *cont.*
- wetlands *cont.*
  - weed control, rights of way, USA 1754
- wildlife
  - birds, herbicides, Canada 5829
  - *Microtus pennsylvanicus,* plant succession, USA 5811

Acer rufinerve, reproductive behaviour, Japan, sex expression 6508

Acer saccharinum
- bark, thickness, fire resistance, USA 1197
- coppice, biomass production, plant water relations, USA 6096
- foliage, sulfur dioxide, nutrient transport, sucrose, metabolism 7181
- insect pests, Hemiptera, USA, control 5783
- plant growth regulators
  - bark, mineral oils, penetration, laboratory tests 4683
  - USA
    - biomass, growth 3781
    - growth, morphology 2063
- plant morphology, habit, taxonomy, Poland 1207
- recalcitrant seeds, chemistry, proteins 3832
- rights of way, USA, control, plant growth regulators 941
- seed germination, inhibition, testas, extracts, glucose 844
- seeds, desiccation, enzymes, phospholipase D 2067
- transplanting, plant water relations, USA 5909
- weed control, USA, herbicides 8644

Acer saccharum
- agroforestry, France 5882
- air pollution
  - forest litter, decomposition, USA 6344
  - photosynthesis, canopy, USA 9752
- bark, thickness, fire resistance, USA 1197
- biomass
  - acid deposition, climate, USA 5172
  - equations, allometry, USA 4195
- canopy gaps
  - USA
    - growth, survival 7868
    - morphology, growth 4800
- carbon cycle, Canada 4490
- carbon dioxide enrichment, drought, plant physiology, USA 5406
- container grown plants, buds, dormancy, frost resistance, Canada 4477
- controlled burning, soil, insect pests 4033
- crown, competition, USA, growth 2692
- deciduous forests
  - fertilizers, cycling, Canada 886
  - natural regeneration, seed banks, Canada 3119
- defoliation, photosynthesis, water use efficiency, insect pests 1477
- dendrochronology
  - Canada, techniques, mass spectrometry 5006
  - forest decline, Canada, simulation 1591
- fertilizers
  - nutrient deficiencies, potassium, Canada 2615
  - soil chemistry, cycling, Canada 888
- foliage
  - damage
    - anatomy 8939
    - remote sensing 4034
  - herbicide residues, Canada 5139
  - optical properties 7032
- forest decline
  - Canada 3813
  - soil chemistry, plant composition, USA 9860
- forest litter
  - decomposition, fertilizers, Canada 885
  - soil fauna, USA 1924
- forests, remote sensing, radar, backscatter, simulation 7677

Acer saccharum *cont.*
- frost resistance, drought injury, sap flow, Canada 9676
- fungal diseases
  - *Discula campestris*
    - USA 5658
      - control 2254
- gas exchange, carbon dioxide enrichment 2080
- gene flow, USA 3986
- grain and figure, geographical distribution, North America 8861
- heartwood, discoloration, selection system, USA 1181
- hydraulic conductivity, roots 310
- insect pests
  - *Corthylus punctatissimus,* USA 5743
  - *Lymantria dispar,* USA, resistance 2318
  - *Taeniothrips inconsequens*
    - USA
      - control 2254, 4033
      - damage 4034
      - plant physiology 1477
- irrigation, seedling growth 6929
- isoenzymes, population genetics, air pollution, Canada 9986
- light, soil water, increment, USA 5181
- marking, paints, USA, damage 2894
- mulching, roots, plant water relations, USA 4300
- mycorrhizas, seedlings, soil arthropods, forest litter, pot experimentation 8262
- natural regeneration, rights of way, cutting frequency, USA 1332
- nutrient deficiencies, soil chemistry, cation exchange, Canada 7972
- photosynthesis
  - light harvesting complexes 3782
  - plant nutrition, soil pH, USA 4710
- plant composition
  - drought injury, Canada, abscisic acid 278
  - frost injury, Canada, abscisic acid 278
- plant parasitic nematodes, *Meloidogyne,* USA, resistance 3189
- plant succession
  - Canada, simulation 4787
  - old fields, USA 4794
- plant water relations, water flow resistance 2843
- reproductive behaviour, Canada 478
- roots
  - mortality, soil temperature, USA 2030
  - plant morphology, USA 409
  - USA, growth 1229
- seed treatment, dormancy, protein synthesis 9437
- seedlings, plant competition, old fields, USA 7308
- selection system, Canada 2629
- site class assessment, stand density, USA 1839
- soil biology, arthropods, mycorrhizas, Canada 7928
- soil chemistry
  - nitrates, soil temperature, Canada 9694
  - nitrogen
    - foliage, chemistry, USA 3576
    - soil biology, USA 307
- soil fauna, Oligochaeta, forest decline, Canada 5275
- soil water, freezing, snow, forest decline, Canada 2811
- species trials, USA 68
- stand structure, Canada 4764
- stem form, USA 8692
- vegetation types, landscape ecology, Canada 3910
- vesicular arbuscular mycorrhizas, forest decline, soil chemistry, USA 10001
- wind damage, stand structure, USA, growth 277

Acer spicatum, soil chemistry, nitrogen, foliage, chemistry, USA 3576

Acer triflorum, seeds, Korea Republic 8573

- ***Aceria bezzii,*** mites, *Celtis australis,* Italy, buds, damage 668
- ***Aceria dioicae,*** mites, *Tamarix nilotica,* Egypt, galls 9177
- ***Aceria parapopuli,*** insect pests, *Populus tremuloides,* galls, Canada 8345
- ***Achaea janata,*** insect pests, *Azadirachta indica,* India, biological control 9149
- **Acid deposition**
  - *Abies alba,* soil chemistry, simulation, plant composition 2889
  - *Abies balsamea,* coniferous forests, soil pH, acidification, USA 1170
  - *Acer saccharum,* biomass, climate, USA 5172
  - *Betula papyrifera,* reproductive behaviour, Canada 3659
  - cloud forests, fog, Venezuela 3650
  - coniferous forests
    - canopy, leaching, USA 8374
    - Japan, chemistry, pH 5337
    - soil chemistry, Sweden 344
    - throughfall
      - chemistry, Bulgaria 7982
      - USA, spatial variation 7657
  - conifers
    - air pollution, ozone, cycling 6347
    - biogeochemistry, throughfall, soil chemistry, Europe 3664
    - fertilizers, irrigation, Europe 3632
    - photosynthesis, plant growth regulators, benzyladenine 462
    - plant nutrition, growth, Finland 7098
    - seedlings, simulation, growth, damage 8834
    - watersheds, USA, pH 352
  - deciduous forests
    - canopy, leaching, USA 8374
    - increment, USA, site factors 2693
    - Japan, chemistry, pH 5337
    - mortality, USA, site factors 2693
  - *Fagus sylvatica*
    - ground vegetation, plant nutrition, Sweden 3755
    - photosynthesis 1156
    - throughfall, stemflow, Italy, chemical composition 337
  - forest ecology, mycorrhizas, interactions, reviews 8840
  - forest health, Canada 9739
  - forest resources, Sweden, growth 3674
  - forest soils, Korea Republic, simulation 8849
  - forest trees
    - cycling
      - biomass, Japan, sulfur 6311
      - Japan, sulfur 6312
    - simulation, Netherlands 1967
    - stemflow, soil chemistry, Japan 7999
    - watersheds, hydrology, Finland, acidification 6333
  - fungal diseases
    - damping off, *Pinus,* seed germination, seedling growth 10004
    - *Discula, Cornus florida,* foliage, morphology 2279
    - *Gremmeniella abietina, Pinus sylvestris* 8304, 9117
  - interception, recovery, *Picea,* watersheds, Sweden 6339
  - monitoring, vegetation types, USA 4781
  - nitrogen
    - *Casuarina equisetifolia,* canopy, India 5310
    - *Picea abies*
      - plant nutrition 3656
      - soil acidity 5336
  - *Picea abies*
    - air pollution
      - Germany, measurement 6350
      - ozone, foliage 7988
    - cycling, Denmark 8001
    - foliage, damage 8839
    - lime, mycorrhizas, enzymes 9993
    - Oligochaeta, fertilizers, lime, humus 1105
    - roots, damage 8839
    - soil, acidification, plant composition, metals 4541
    - soil chemistry, nutrient deficiencies, Germany 9755
- **Acid deposition** *cont.*
  - *Picea rubens*
    - clouds, stand structure, USA 6261
    - coniferous forests, soil pH, acidification, USA 1170
    - foliage, damage, USA 5313
    - forest decline
      - soil chemistry
        - plant nutrition, aluminium 1141
        - USA 1169
    - frost resistance 3024
    - ozone, USA, interactions 3667
    - soil chemistry, acidification, simulation 345
  - *Picea sitchensis*
    - forest influences, streams, chemistry, UK 8868
    - frost resistance
      - age of trees, genetic variation 2887
      - UK, assessment 5317
  - *Pinus,* seedlings, roots, development 7100
  - *Pinus echinata,* gas exchange, USA 340
  - *Pinus ponderosa,* air pollution, ozone, enzymes 7093
  - *Pinus radiata,* forest influences, Spain 3671
  - *Pinus sylvestris*
    - foliage
      - endophytes, Finland 2226
      - growth, morphology, Finland 3647
    - seedling growth, soil organic matter, field tests, Poland 1958
  - *Pinus taeda*
    - air pollution
      - ozone
        - soil chemistry, heavy metals 8003
        - soil enzymes
          - plant nutrition 9738
          - seedling growth 9738
    - genetic variation, ozone, seedling growth 1963
    - plant composition, biomass production, USA 1158
  - *Pseudotsuga menziesii*
    - nutrient uptake 3631
    - soil chemistry, metals, Netherlands 7892
  - research, Norway 754
  - resistance, methodology, soil chemistry, Austria 335
  - seasonal variation, estimation, forest trees, Netherlands 3655
  - site types, Germany 8846
  - soil chemistry
    - cycling, simulation, USA 3666
    - hydrology, Sweden, simulation 1905
    - simulation
      - Europe 5338
      - Scandinavia 8510
  - statistical analysis, risk assessment 4196
  - sulfate, chloride, estimation, mixed forests, USA 3320
  - sulfur
    - *Juniperus virginiana,* dendrochronology, heartwood, USA 4141
    - *Quercus ilex,* water quality, logging, Spain 7548
  - synecology, Germany, books 1593
  - water pollution, surveys, forest influences, UK, simulation 3677
- ***Acioa barteri***
  - agroforestry, pruning trash, decomposition, precipitation, Nigeria 8434
  - fallow, forest litter, cycling, Nigeria, nutrients 2818
  - pruning trash, decomposition, soil fauna, Nigeria 5262
  - ultisols, fertilizers, seed size, pot experimentation 7758
- ***Acizzia,*** insect pests, *Acacia,* Philippines, damage 2310
- ***Acizzia uncatoides,*** insect pests, ornamental woody plants, USA, biological control 7509
- ***Acmena,*** taxonomy, Thailand 8972
- ***Acnistus arborescens,*** phenology, flowering, fruiting, Venezuela 5368
- ***Acrocarpus fraxinifolius,*** agroforestry, species trials, Rwanda 4961
- ***Acrocomia aculeata,*** flowering, fruiting, Brazil 9880
- ***Acromyrmex lundii,*** insect pests, Argentina 2301
- ***Acronychia pedunculata,*** foliage, Sri Lanka, chemical composition 3751
- ***Acrostichum aureum,*** mangroves, stand structure, soil properties, Nigeria 7293
- ***Actias luna,*** silkworms, carbon dioxide enrichment, *Betula papyrifera,* food plants 8683
- ***Actinodaphne ambigua,*** foliage, Sri Lanka, chemical composition 3751
- ***Actinomyces,*** bacterial diseases, *Acer rubrum* 2289
- ***Adalia bipunctata,*** insect pests, *Rhaphiolepis umbellata,* Japan 5761
- ***Adansonia***
  - pollination, flowers, morphology 6512
  - taxonomy 8970
- ***Adansonia digitata***
  - elephants, *Loxodonta africana,* browsing damage, Tanzania, simulation 4048
  - foliage, chemistry, amino acids 7176
  - plant disorders, fungal diseases, *Capnodendron,* Zimbabwe 7203
- **Adaptation,** forest trees, genetics, climatic change 2172
- ***Adelges japonicus,*** insect pests, *Picea jezoensis,* Japan, galls 5689
- ***Adelges nordmannianae*** (*see Dreyfusia nordmannianae)*
- ***Adenanthera mantaroa,*** taxonomy, Madagascar, new species 9889
- ***Adenanthera pavonina,*** seed germination 1683
- ***Adhatoda vasica,*** vegetation, reclamation, sodic soils, India 712
- ***Adina cordifolia,*** wood anatomy, rays 2029
- ***Adinandra dumosa,*** photosynthesis, Singapore 6467
- **Administration** (*see* Forest administration)
- **Advance growth** (*see* Natural regeneration, advance growth)
- **Advisory services** (*see* Extension)
- ***Aegiceras corniculatum,*** mangroves, phenology, forest litter, Australia 3704
- ***Aegle marmelos***
  - degraded forests, stand structure, synecology, India 213
  - medicinal plants, degraded forests, Sri Lanka 5851
- ***Aeolesthes sarta,*** insect pests, *Ulmus minor,* Uzbekistan, control 657
- ***Aepyceros melampus,*** wildlife, *Acacia tortilis,* natural regeneration, Tanzania 4065
- **Aerial photography** (*see* Remote sensing)
- ***Aesculus hippocastanum***
  - air pollution, plant water relations 1970
  - electrical phenomena in trees, France, measurement, sap flow 2081
  - foliage
    - enzymes, isoenzymes, seasonal variation, UK 3770
    - optical properties, chlorophyll 2996
    - pollution, New Zealand, heavy metals 3675
  - fungal diseases, *Guignardia aesculi,* Austria 9158
  - insect pests
    - *Cameraria ohridella*
      - Austria 9158
      - Germany 5726
    - *Pulvinaria regalis,* UK, biology 5697
  - plant morphology, habit, taxonomy, Poland 1207
  - recalcitrant seeds, chemistry, proteins 3832
  - somatic embryogenesis 876
    - explants 5089
  - tissue culture, metabolites, triterpenoid saponins 3470
  - woodlands, soil pollution, heavy metals, UK 8855

Aesculus indica
- vegetation types
  - biomass production, stand characteristics, India 6540
  - cycling, India 6541

Aesculus turbinata
- seed production, physiology, costs 9868
- stem form, snow, Japan, resistance 2954

Aesthetic value, coniferous forests, Canada 4377

Aethomys chrysophilus, rodents, seed predation, *Acacia,* savannas, South Africa 4068

Afforestation (*see also* Forest plantations; Planting)
- agricultural land
  - Belgium 9244
  - broadleaves, forest economics, subsidies, Italy 159
  - carbon cycle, subsidies, USA 5986
  - European Union, planning 8523
  - farm forestry, Italy 10093
  - forest economics, Italy, economic theory 4461
  - forest trees, forest economics, Italy 158
  - fuel plantations, Europe 8553
  - *Juglans,* Italy 2632
  - land use
    - France 9253
    - policy, UK 7694
  - mountain areas, landscape, perception, Switzerland 8451
  - *Picea abies,* soil morphology, forest influences, Denmark 5351
  - *Pinus,* stand establishment, mortality, South Africa 7778
  - *Pinus patula,* allelopathy, nutrient deficiencies, South Africa 154
  - risk, USA, economics, decision making 9256
  - subsidies, Germany 9402
- agroforestry, development projects, Niger 1546
- amenity and recreation areas, valuation, Spain 8448
- biodiversity, management, genetic resources 10126
- broadleaves
  - mined land, reclaimed land, USA 9539
  - reclaimed land, Singapore 4095
- choice of species
  - Costa Rica 9423
  - saline soils, Russia 2544
- conifers
  - choice of species, altitude, France 9421
  - soil chemistry
    - Germany 9764
    - UK 5353
- degraded forests, soil properties, Costa Rica 8390
- desertification, Arid Regions, Turkmenistan 2405
- development projects
  - irrigation, Kenya 5981
  - Philippines 5980
- direct sowing, *Balsamocarpon brevifolium,* fruits, production, Chile 6146
- fields, forest trees, agroforestry, France, research 7580
- forest economics
  - Japan, profits 7857
  - UK, simulation 3531
- forest influences
  - atmosphere, forest management 1188
  - streams, chemistry, soil chemistry, UK 10083
- forest management
  - land use, UK 6204
  - planning, permits, environmental protection, South Africa 6989
- forest nurseries, Italy 143
- forest policy, forest economics, carbon cycle, market economics 2780
- forest trees
  - Germany, carbon cycle 8866
  - species trials, Canary Islands 6032

Afforestation *cont.*
- forests, biodiversity, nature conservation, India 4969
- grants, Argentina 5042
- grasslands
  - bamboos, *Bambusa blumeana,* Philippines 8394
  - *Eucalyptus grandis,* NPK fertilizers, India 3421
  - Indonesia, *Imperata cylindrica* 7562
  - multipurpose trees, site preparation, fertilizers, Indonesia 7781
- history
  - conferences 2476
  - Germany 9501
- hydrology, erosion, Spain 9238
- karst soils, history, Europe 2476
- land use, France 1544
- lowland areas, mixtures, Sri Lanka 935
- mangroves
  - erosion control, India 3225
  - *Nypa fruticans,* site requirements, tides, Bangladesh 7776
- marginal land, reclamation, silviculture, India, books 4
- *Melaleuca,* genetic resources, Vietnam 3990
- mine spoil, soil toxicity, Ukraine 10091
- mined land
  - reclamation, New Caledonia 9252
  - woody plants, reclamation, species trials, New Caledonia 9247
- mixtures, degraded land, reclamation, Australia 3233
- multipurpose trees, waste land, soil organic matter, carbon cycle, India 7561
- mycorrhizas, conifers, forest nurseries, France, plant nutrition 5576
- old fields
  - *Picea abies,* stand development, soil chemistry, Norway 7890
  - *Pinus elliottii,* site preparation, USA, pest control 6927
- pastures, forest trees, Costa Rica, stem form, growth 5051
- *Picea sitchensis,* peatlands, carbon cycle, UK 2633
- *Pinus pinaster,* reclamation, France, history 2407
- *Pinus sylvestris*
  - peatlands, forestry practices, climate, Sweden 6112
  - spacing, tree breeding, Sweden 9974
- *Pinus taeda,* forest decline, mine spoil, USA 2092
- *Populus tremula,* soil conservation, soil water retention, China 5841
- projects, carbon cycle, forest influences, atmosphere, World 8013
- *Prosopis,* Argentina, techniques 4951
- reclamation
  - agroforestry, Vietnam 6709
  - common lands, development projects, India 7559
  - degraded land, Vietnam 3244
  - Niger, techniques 5852
  - peatlands, Poland 714
  - plant succession, deforestation, Amazonia 7557
  - polders, Netherlands 1537
  - saline soils, India, techniques 8387
  - shelterbelts, agroforestry, research, Russia, books 2455
- sandy soils, *Prosopis juliflora,* Saudi Arabia 1536
- semiarid zones, water harvesting, runoff, Israel 6697
- site preparation, forestry machinery, Italy, research 6118
- slopes, measurement, instruments, India 1791
- soil conservation, hydrology, India 2401
- subsidies, Italy 1638
- *Swietenia macrophylla,* stand establishment, biomass distribution, Costa Rica, root systems 9530
- tree breeding, plant physiology, vegetative propagation, Tropics 554
- trials, conifers, international cooperation, Russia 9502

Afforestation *cont.*
- ultisols, soil formation, soil suitability, China 8786
- vegetative propagation, shoot cuttings, Peninsular Malaysia 6046
- water conservation, gels, fertilizers, Yemen 153
- water management, Arid Regions, Iran 1116
- watersheds
  - hydrology, water harvesting, Israel 8379
  - runoff, Sri Lanka 2399
- wetlands, *Picea sitchensis,* streams, water quality, UK 4081
- woodlands, land use, UK, books 6776

Afghanistan, environmental management, sustainability, mountain areas, books 2453

Africa
- *Acacia*
  - growth rings, wood anatomy, rain 396
  - symbiosis, conferences, research 6807
- *Acacia senegal,* gums, production, economics 8675
- agroforestry, history, socioeconomics 5886
- America, agroforestry, livestock farming, conferences 4181
- Arid Regions, *Hyphaene thebaica,* multipurpose trees 8037
- *Colophospermum mopane,* geographical distribution, site factors, vegetation types 6535
- community forestry, forest management, resource management, bibliographies 6795
- deforestation
  - climate, simulation 3255
  - palaeoclimatology 7569
  - sustainability, policy 9262
- *Faidherbia albida*
  - growth rings, wood anatomy, rain 396
  - symbiosis, conferences, research 6807
- *Fernandoa,* taxonomy 8965
- forest trees, medicinal plants 200
- forestry, women 1632
- forestry development, vegetation types, forest management, Arid Regions 1011
- forests, woodlands, nomenclature, terminology 3907
- insect pests, *Heteropsylla cubana, Leucaena leucocephala* 2312
- remote sensing, vegetation, phenology, simulation 9631
- Rutaceae, taxonomy 3045
- savannas, forest management, silvicultural systems, climate 8600
- tropical forests
  - biodiversity, arthropods, soil fauna 5037
  - forest management, sustainability 6206
  - palaeoecology, pollen analysis 3067
- Tropics
  - agroforestry, livestock farming, conferences 4181
  - land use, shifting cultivation 9265
- urban forestry, forest influences 1588
- vegetation types, classification, geographical distribution, theory 6542

Africa South of Sahara
- *Acacia,* seed banks 3962
- deforestation 2410
- forest policy, forest management, development projects 9395
- savanna woodlands, plant succession, drought, simulation 4212
- *Sesbania,* seed collection, genetic resources, international cooperation 3136

Afrocarpus, foliage, morphology, palaeobotany, taxonomy, Australia 497

Afzelia africana, mycorrhizas, seedlings, carbohydrates 2248

Afzelia quanzensis, mycorrhizas, *Pisolithus,* seedlings 9075

- ***Agathis***
  - foliage, flavonoids, chemotaxonomy, New Zealand 8082
  - resin tapping
    - copal, production, Indonesia 969
    - Indonesia 196
- ***Agathis australis***
  - fertilization, cytoplasmic inheritance 9884
  - foliage, flavonoids, chemotaxonomy, New Zealand 8082
  - pollination, fertilization 8948
  - seeds, storage, viability 6040
  - synecology, canopy gaps, natural regeneration, New Zealand 1413
- ***Agathis borneensis***
  - genetic variation, population genetics, Brunei Darussalam 7354
  - tissue culture, Brunei Darussalam 6893
- ***Agathis dammara***
  - cones, production, Indonesia, estimation 1614
  - grafting, tree breeding, Indonesia 877
- ***Agathis loranthifolia*** (*see Agathis dammara*)
- ***Agathis macrophylla***, seeds, storage, viability 6040
- ***Agathis robusta***, silviculture, exotics, India 9544
- **Age**
  - bamboos
    - *Bambusa*, stems, morphology, Bangladesh 6419
    - *Melocanna baccifera*, stems, morphology, Bangladesh 6419
  - *Castanea sativa*, wood chemistry, tannins 8089
  - *Pinus radiata*, foliage, branches, biomass, New Zealand 3734
  - *Quercus*, wood chemistry, heartwood, tannins 8090
  - *Quercus petraea*, wood chemistry, tannins 8089
- **Age determination**, forest trees, radionuclides, fallout 1151
- **Age of trees**
  - *Bertholletia excelsa*, Brazil 4380
  - conifers, forest fires, natural regeneration, Sweden, history 3064
  - *Eucalyptus globulus*, essential oils, altitude, India 9568
  - *Fagus sylvatica*, bark, anatomy, image processing 6398
  - *Libocedrus chilensis*, pollen, viability, Argentina 6510
  - mistletoes, *Loranthus, Quercus,* India 617
  - *Picea abies*
    - heartwood, increment, diameter, Estonia 1183
    - sapwood, increment, diameter, Estonia 1183
  - *Picea sitchensis*, acid deposition, frost resistance, genetic variation 2887
  - senescence, *Pinus*, photosynthesis, USA 2992
  - *Sequoiadendron giganteum*, USA, methodology 9314
- **Aging** (*see* Senescence)
- ***Aglaia lawii***, wood anatomy, Indonesia 6407
- ***Aglaia versteesteghii***, wood chemistry, Indonesia 6448
- **Agriculture**, forest trees, biology, silviculture, Tropics, reviews 9372
- **Agriculture/forestry relations** (*see* Agroforestry)
- ***Agrilus biguttatus***, insect pests, *Quercus*, Germany 10048
- ***Agrilus sexsignatus***, insect pests, *Eucalyptus deglupta*, Philippines, damage, control 1476
- ***Agrobacterium tumefaciens***, bacterial diseases, *Pinus radiata*, genetic variation, resistance 5666
- **Agroforestry** (*see also* Artificial regeneration; Shifting cultivation; Taungya)
  - *Acacia*, choice of species, Australia, arid zones, subtropics 3369
  - *Acacia caven*, savannas, Chile 5878
  - *Acacia mangium*, reclamation, mined land, species trials, Peninsular Malaysia 3241
  - *Acacia nilotica*, allelopathy, India 7316

- **Agroforestry** *cont.*
  - *Acacia senegal*, nitrogen cycle, Arid Regions, simulation 4118
  - *Acacia tortilis*, India 3274
  - *Acer pseudoplatanus*, sheep, birds, ecology, UK 6725
  - afforestation, development projects, Niger 1546
  - *Ailanthus excelsa*, forest economics, farm forestry, India 9648
  - *Albizia coriaria*, indigenous knowledge, Uganda, theses 9282
  - *Albizia julibrissin*, cycling, USA 10116
  - *Albizia lebbeck*, Australia 6729
  - *Albizia stipulata*, biomass production, cycling, India 8432
  - allelopathy, reviews 7319
  - *Alnus nepalensis*, cycling, India 4119
  - *Anacardium occidentale*, India, economics 725
  - Arid Regions, books 7
  - Asia 5881
  - Australia 9283
  - beekeeping 8682
  - books 3303, 8474
  - bottomland forests, natural regeneration, wild pigs, Croatia 3268
  - broadleaves
    - Corsica 5883
    - forest plantations, pastures, trials, France 5880
    - soil water, microclimate, Canada 9278
  - browse, goats, Greece 4117
  - carbon cycle, deforestation, control, climatic change 3259
  - *Cassia siamea*
    - green manures, decomposition, Kenya 5874
    - plant competition, Togo 7573
  - *Cassia spectabilis*
    - green manures, decomposition, Philippines 2418
    - nitrogen fixation, Philippines 4115
  - *Castanea sativa*, coppice, management, France 5877
  - *Casuarina*
    - books 2448
    - India 3272
  - *Casuarina cunninghamiana*, Australia 6729
  - choice of species
    - Bangladesh 6717
    - Bolivia, books 9
    - climatic change, greenhouse effect, control 2796
    - Costa Rica 9423
    - root systems, plant competition, soil fertility 10100
  - *Combretum*, Niger, cattle, grazing, management 4960
  - conferences 9325
  - coniferous forests, natural regeneration, weed control, sheep, USA 7583
  - conifers, forest plantations, trials, France 5876
  - coppice
    - *Albizia lebbeck*, Burkina Faso 10117
    - *Azadirachta indica*, Burkina Faso 10117
    - *Leucaena leucocephala*, Burkina Faso 10117
  - crops
    - interface, *Eucalyptus globulus*, microclimate, simulation 9357
    - soil fertility 10099
  - degraded forests, Mexico 9287
  - *Desmanthus virgatus*, erosion control, Philippines 5873
  - development
    - economics, sustainability 10097
    - indigenous knowledge
      - methodology 10103
      - Nepal 10104
    - land use planning, Liberia 1562
    - planning, Lao 3271
    - policy, land use, research 10096
    - rehabilitation, land use, conflict, Venezuela 6727
  - development aid, Denmark 4232

- **Agroforestry** *cont.*
  - development projects
    - databases
      - Central America 10109
      - Dominican Republic 10109
    - economics, sustainability, Burkina Faso 1555
    - Ecuador 4114
    - extension
      - India 4108
      - Tanzania 1571
    - international cooperation, Thailand, reports 760
    - Sahel, extension 10113
  - economics
    - development projects, America 10098
    - *Eucalyptus globulus*, Australia 9284
    - *Faidherbia albida*, Tanzania 3261
    - fruit trees, rain forests, Indonesia 4109
    - *Ilex paraguariensis*, Paraguay 1560
    - *Leucaena leucocephala*
      - India 727
      - Tanzania 3261
    - *Pinus radiata*, Australia, simulation 7578
  - education
    - international cooperation, South East Asia 9267
    - training, conferences 5938
  - equilibrium
    - France 5887
    - Mediterranean Region 5887
  - erosion control
    - India 2416
    - watershed management, development projects, Haiti 7581
  - *Erythrina*, botany, nitrogen fixation, research, conferences 3309
  - *Eucalyptus*
    - allelopathy, reviews 7318
    - browsing damage, sheep, Australia 9270
  - *Eucalyptus camaldulensis*
    - groundwater level, control, USA 5870-5872
    - salinity, control, USA 5870-5872
  - *Eucalyptus citriodora*, weed control, livestock, Brazil 6723
  - *Eucalyptus globulus*, groundwater, Australia 7579
  - *Eucalyptus maculata*, Australia 6729
  - *Eucalyptus tereticornis*
    - fuelwood, India 6726
    - India, fungal diseases 7402
  - Europe 5881-5882
  - Fabaceae, direct sowing, species trials, Jamaica 2420
  - *Faidherbia albida*
    - increment, variation, soil fertility, Niger 3275
    - Tanzania 7576
  - *Ficus natalensis*, indigenous knowledge, Uganda, theses 9282
  - fodder, trees, Nepal, conferences 8490
  - forest management, participation, India 3495
  - forest products industries, South Africa, production possibilities 724
  - forest resources, Cameroon 9396
  - forest trees
    - afforestation, fields, France, research 7580
    - morphology, simulation 9356
  - forestry development
    - forest management, Niger 811
    - sustainability, land use, indigenous knowledge, Vanuatu 9255
  - forests, grazing, France 5884
  - France 5881-5882
  - fuel plantations, Developing Countries 3363
  - *Gliricidia sepium*
    - direct sowing, Jamaica 2419
    - fodder, production, Nigeria 8421
    - green manures, decomposition, Philippines 2418
    - microclimate, Côte d'Ivoire, crops, plant diseases 8431
    - nitrogen fixation, Philippines 4115

- **Agroforestry** *cont.*
  - *Gliricidia sepium cont.*
    - provenance trials, Indonesia, fodder 8567
    - roots, dynamics, plant competition, Côte d'Ivoire 8425
  - *Grevillea robusta,* multipurpose trees, silviculture, tree breeding, conferences 2462
  - *Guiera senegalensis,* Niger, cattle, grazing, management 4960
  - history
    - development, China 10106
    - Mexico, reviews 4111
    - socioeconomics, Developing Countries 5886
  - hydrology, land use, Indonesia 2397
  - India 2417
    - books 750, 8474
  - indigenous knowledge, data collection, Rwanda, methodology 10105
  - Indonesia 1566, 6733
    - conferences 2475
  - insect pests, natural enemies, biological control, reviews 9189
  - irrigation, saline water, water purification, USA 10112
  - *Khaya,* forest plantations, sheep, Cuba 1556
  - land use
    - change, Temperate Zones, Industrial Countries, conferences 9324
    - integrated systems, greenhouse effect, climatic change 2795
    - Italy 9271
    - sustainability
      - Spain 1561
      - Sri Lanka 3270
    - Tropics 9279
  - land use planning
    - management, Sahel 1547
    - tribes, USA 8406
  - *Larix,* forest plantations, France, research 7580
  - *Larix eurolepis,* sheep, birds, ecology, UK 6725
  - *Leucaena,* innovation adoption, Indonesia 3260
  - *Leucaena leucocephala*
    - contour ridging, India 2421
    - direct sowing, Jamaica 2419
    - erosion control, Malawi 3256
    - fodder, production, Nigeria 8421
    - fuelwood, India 6726
    - green manures, soil chemistry, Kenya 3257
    - India 7582
    - plant competition, Togo 7573
    - soil conservation, water conservation, India 5875
  - livestock farming, Developing Countries, conferences 4181
  - *Lupinus arboreus,* biomass production, nurse trees, defoliation, UK 3478
  - Mediterranean Region 5881
    - environmental factors 10111
  - *Melaleuca,* groundwater, Australia 7579
  - *Morus,* sericulture, India 2412
  - *Morus cathayana,* sericulture, Indonesia 1805
  - multipurpose trees
    - acid soils, lime, Indonesia 4113
    - biomass production, cycling, India 8432
    - Brazil 2422
    - choice of species
      - Bangladesh 6716
      - development projects, Cameroon 6734
    - development projects, reclamation, degraded forests, Thailand 3242
    - green manures, decomposition, nutrients, Togo 8422
    - Haiti 1563
    - increment, India 4110
    - India 10107
      - conferences 2463
    - lac, China 978
    - land use, Côte d'Ivoire 8423
    - planting, soil types, Tunisia 8420
- **Agroforestry** *cont.*
  - multipurpose trees *cont.*
    - pruning, root systems, plant competition, Indonesia 10102
    - pruning trash, decomposition, precipitation, Nigeria 8434
    - range management, research, India 10114
    - reclamation, waste land, India, books 6773
    - species trials
      - acid soils, Cameroon 2542
      - Rwanda 4961
      - soil properties, soil types, Nigeria 6868
    - waste land, soil organic matter, carbon cycle, India 7561
  - Nepal, reviews 9285
  - Nigeria, surveys 4112
  - nitrogen fixing trees
    - choice of species 2415
    - pruning trash
      - chemistry
        - decomposition
          - Indonesia 1939
          - laboratory tests 1939
  - North America 5881
  - *Paraserianthes falcataria,* reclamation, mined land, species trials, Peninsular Malaysia 3241
  - *Paulownia,* China 3267, 5881
  - *Pinus,* amenity forests, management, forest fires, France 5877
  - *Pinus halepensis,* rural economy, land use planning, forestry development 8424
  - *Pinus nigra*
    - forest plantations, management, France 5877
    - thinning, France, simulation, growth 9268
  - *Pinus pinaster,* nitrogen-phosphorus fertilizers, spacing, Greece 8428
  - *Pinus pinea,* forest plantations, France, research 7580
  - *Pinus radiata*
    - forest plantations, Chile 5878
    - nitrogen fertilizers
      - plant competition, New Zealand 1568-1569
      - plant nutrition, New Zealand 1568-1569
    - plant competition, foliar diagnosis, statistical analysis, New Zealand 4957
    - soil chemistry, New Zealand 4958
  - *Pinus sylvestris,* heathlands, tourism, France 5879
  - *Pinus taeda,* USA 9274
  - *Populus*
    - Argentina 1567
    - riparian forests, USA, agricultural land 3269
  - *Populus deltoides*
    - Argentina 6735, 10108
    - soil fertility, India 2413
    - South Africa 723
    - spacing, Pakistan 6724
  - *Populus* 'DN-177', pot experimentation 9277
  - *Populus interamericana,* soil properties, nitrogen cycle, Sweden 10115
  - profiles
    - development projects
      - South Asia 3263
      - South East Asia 3263
  - *Prosopis juliflora,* reclamation, saline soils, India 8389
  - *Quercus*
    - coppice, management, France 5877
    - firebreaks, Italy 3273
    - history, Germany, economics 782
    - mountain forests, deforestation, Costa Rica 7575
  - *Quercus cerris,* silvicultural conversion, Italy 1558
  - *Quercus coccifera,* goats, Greece 9286
  - *Quercus ilex,* dehesa grasslands, botanical composition, Spain 9924
  - *Quercus pubescens,* thinning, France, simulation, growth 9268
- **Agroforestry** *cont.*
  - *Quercus pyrenaica,* dehesa grasslands, synecology, Spain 8433
  - *Quercus suber,* amenity forests, management, forest fires, France 5877
  - rain forests, synecology, cattle, Mexico 6736
  - reclamation
    - afforestation
      - shelterbelts, research, Russia, books 2455
      - Vietnam 6709
    - degraded land, Vietnam 3244
    - soil types, farm forestry, Australia, wetlands 8410
    - waste land
      - farm forestry, fuel plantations, India 7558
      - India, conferences 767
  - research 10095
    - Asia, conferences 2477
    - international organizations
      - CGIAR 6005
      - CIFOR 6005
      - ICRAF 6005
    - requirements 5885
  - research projects
    - Rwanda, conferences 9323
    - technology transfer, USA 9272
  - reviews 9280
  - *Rhizophora mucronata,* aquaculture, Indonesia 1528
  - riverbank protection, pollution control, buffer zones, USA 9273
  - *Robinia pseudoacacia*
    - mulches, decomposition, USA 9276
    - pot experimentation 9275
  - Sahel, bibliographies 5934
  - *Salix,* Argentina 6735
  - savanna woodlands, land use, West Africa, classification 9927
  - savannas, land use, West Africa, classification 9927
  - shifting cultivation, carbon cycle, soil organic matter, Tropics, reviews 8427
  - simulation, computer techniques 9358
  - socioeconomics, Rwanda 10110
  - soil conservation, Philippines 8435
  - soil fertility, plant competition, Tropics, simulation 4107
  - soil suitability, mapping, Cuba 9288
  - species trials, forest plantations, grazing, France 5884
  - *Sus scrofa,* UK 3264
  - sustainability
    - Algeria 5869
    - Arid Regions, reviews 7689
    - erosion control, Indonesia 3262
    - USA 9322
  - *Swietenia macrophylla,* forest plantations, sheep, Cuba 1556
  - Tanzania 6732
  - *Tectona grandis,* seed orchards, weed control, India 1554
  - Temperate Zones 5844-5847, 5867, 5876-5888
    - conferences 8485
    - Europe 5888
  - Tropics 1564
    - books 750
    - conferences 9324
    - handbooks 8471
  - USA, surveys 3258
  - Vietnam, periodicals 9316
  - virgin forests, birds, species diversity, Indonesia 7577
  - West Africa 1565
  - woody plants, ecosystems, semiarid zones, Sahel, books 8466
  - *Ziziphus rotundifolia,* India 3274
- **Agroforestry systems,** *Gliricidia sepium,* establishment, Nigeria 6730
- **Ailanthus,** insect pests, *Atteva fabriciella,* India, natural enemies 1485
- **Ailanthus altissima**
  - sap, allergens, UK 6863
  - seedlings, *Quercus,* forest litter, plant succession, USA 4791

- ***Ailanthus excelsa***
  - forest economics, agroforestry, farm forestry, India 9648
  - forest plantations, nitrogen-phosphorus fertilizers, sandy soils, India 131
  - nitrogen-phosphorus fertilizers, increment, nutrient uptake, India 9468
  - species trials, reclamation, fly ash, India 9248
- ***Ailanthus triphysa,*** Indonesia, wood chemistry 2059
- ***Aimophila aestivalis***
  - birds
    - endangered species, forest management, USA 5817
    - forest fragmentation, USA, population ecology 9217
    - *Pinus taeda,* forest management, USA, simulation 6990
- **Air layering** (*see* Vegetative propagation, air layering)
- **Air pollution** (*see also* Acid deposition)
  - *Abies alba*
    - foliage, Slovakia 9742
    - pollen germination, Slovakia 488
    - seed set, Slovakia 488
  - *Acer saccharum,* isoenzymes, population genetics, Canada 9986
  - acid deposition, *Cryptomeria japonica,* simulation, growth 9747
  - *Aesculus hippocastanum,* foliage, New Zealand, heavy metals 3675
  - agricultural land, broadleaves, foliage, damage, India 5328
  - alpine vegetation, throughfall, soil chemistry, Europe 5321
  - aluminium, forest trees, lichens, Finland 8843
  - ammonia
    - deposition, *Pseudotsuga menziesii,* Netherlands 2877
    - *Pinus sylvestris*
      - biochemistry 3645
        - Germany 8847
      - foliage, plant physiology 3789
        - Germany 7104
    - *Pseudotsuga menziesii*
      - Netherlands, rhizosphere fungi 1972
      - plant physiology 2862
  - arsenic, forest trees, Germany 8836
  - *Betula,* bark, lichens, Finland, chemistry 7996
  - *Betula pubescens,* foliage, defoliation, Finland, TCA 1165
  - boreal forests
    - Russia, damage 8838
    - stand characteristics, Russia 7994
  - broadleaves
    - bark, chemistry, Netherlands, trace elements 3749
    - India, growth, plant physiology 2869
    - plant water relations 1970, 7090
    - runoff, soil chemistry, Norway, nitric acid 5320
  - carbon dioxide, broadleaves, forest litter, decomposition, USA 6344
  - chlorinated hydrocarbons
    - *Pinus*
      - foliage, chemistry, Finland 7989-7990
      - indicator plants, Europe 1978
  - chlorine
    - dust, *Fagus sylvatica,* foliage, Switzerland 336
    - *Fagus sylvatica,* indicator plants, Switzerland 2495
  - coniferous forests
    - forest decline, Norway, assessment 7207
    - forest ecology, Germany 6340
    - indicator plants, Sweden 8002
    - simulation, Russia 7091
    - soil pH, Finland 3570
    - throughfall, soil chemistry, Europe 5321
  - conifers
    - foliage
      - diffusion models 4565
      - plant nutrition, UK 6453
- **Air pollution** *cont.*
  - conifers *cont.*
    - forest decline, mountain forests, France 3814
    - forest health, France, history 3673
    - increment, diameter, Russia 4569
    - photosynthesis, Russia 6335
    - plant nutrition
      - nitrogen metabolism, Netherlands 5290
      - throughfall, Netherlands, nitrogen 5318
    - plant physiology, reviews, field experimentation, growth chambers 5956
    - roots, Sweden, soil, distribution 5319
    - soil chemistry
      - soil biology, Netherlands, nitrogen 5318
      - Sweden, nitrates, soil solution 5246
    - throughfall, soil chemistry, Sweden, nitrates 5245
  - control, forest trees, India, reviews 3668
  - damage
    - forest economics
      - Europe 2779
      - North America 2779
    - mountain forests, artificial regeneration, Germany 9500
    - national parks, USA 8444
    - *Picea abies,* assessment 6818
    - *Pinus sylvestris*
      - foliage, waxes, Poland 1227
      - photosynthesis, Finland, methodology 1259
    - *Quercus robur,* Germany, waxes 5333
    - remote sensing, thematic mapper, Europe 6233
    - research, methodology 1964
    - USA, stress factors, interactions 2460
    - woody plants, urban areas, India 6328
  - degraded forests, Russia 1157
  - deposition
    - conifers
      - forest borders, Netherlands 6345
      - throughfall, precipitation, Western Europe 2866
    - deciduous forests, USA 7101
    - estimation, *Pinus sylvestris,* leaf conductance, Sweden 7991
    - *Picea abies*
      - cycling, Germany 6332
      - Denmark, estimation 330
      - foliage, damage, Finland 9746
      - simulation, Germany 331
    - *Picea sitchensis,* snow, UK 333
    - *Pinus,* USA 332
    - *Quercus rubra,* USA, simulation 2871
  - dry deposition, conifers, foliage, waxes, stomata 8841
  - dust
    - damage, street trees, Pakistan 4550
    - ozone, deposition, *Pinus pinaster,* France 4551
    - *Quercus coccinea,* photosynthesis, plant water relations, Greece 6331
  - ecology, USA 2865
  - effects, *Pinus ponderosa,* seedlings, methodology 7655
  - epiphytes, forest trees, indicator plants, Sweden 6334
  - *Eucalyptus,* forest influences, atmosphere, Portugal, measurement 8499
  - *Eucalyptus tereticornis,* wood properties, India 1987
  - *Fagus sylvatica*
    - foliage, provenance, Italy, damage 5340
    - forest decline, Poland 2873
    - precipitation, hydrology, UK 3670
    - Switzerland, municipal refuse disposal, chloride 6341
    - wood chemistry, heavy metals, Germany, seasonal variation 6343
  - fallout, forestry, Russia, Ukraine, Belarus 9408
- **Air pollution** *cont.*
  - fluoride, *Tsuga heterophylla,* forest economics, Canada, growth 4557
  - fluorides
    - conifers, foliage, damage, Norway 5331
    - forest trees, foliage, damage, Norway 5330
    - *Pinus strobus,* biochemistry 6349
  - fly ash, detection, *Pinus sylvestris,* Germany 4188
  - forest decline
    - climate, Central Europe 8946
    - Europe 5417
    - France, legislation, research, reviews 1159
    - ground vegetation, synecology, synecology, Czechoslovakia 339
    - international cooperation
      - Finland 6859-6860
      - Norway 6859
      - Russia 6859-6860
    - North America 5417
    - Sweden 4564
  - forest ecology
    - research, techniques 6354
    - Russia 5332
    - stand characteristics, stability, methodology 6811
  - forest fires, Tropics, emission 385
  - forest trees
    - Arid Regions, reviews 1968
    - coastal areas, Italy, salt spray, surfactants 8837
    - experimental design, growth chambers, reviews 5957
    - Finland, field experimentation, growth chambers 5955
    - foliage
      - chemistry
        - Slovakia 9745
        - TCA, Finland 338
      - cuticle, conferences 2450
    - increment 1971
      - dendrochronology, Poland 7612
    - plant physiology, abiotic injuries 1154
    - pollination, genetic diversity, climatic change, reviews 5424
    - roadside plantations, forest influences, Japan 7126
    - Russia, fluorine, damage 1962
  - forests
    - Europe, assessment 1163
    - forest economics, Poland 1959
    - Poland, forecasting 1956
    - soil, nitrogen cycle, reviews 1953
  - fungal diseases, *Gremmeniella abietina, Pinus sylvestris,* Europe, damage 9118
  - growth chambers, branches 5954
  - heavy metals
    - amenity trees, indicator plants, Greece 7106
    - *Betula alba,* foliage, Finland, insect pests 4886
    - clear felling, forest influences, Norway 8019
    - coniferous forests, indicator plants, Finland 3672
    - damage
      - *Populus* 'Marilandica', shoot cuttings 7084
      - *Populus* 'NE-42', shoot cuttings 7084
    - forest litter, respiration, nutrients, Poland 8798
    - forests, soil biology, Poland 343
    - mountain forests, soil chemistry, USA 342
    - *Pinus,* foliage, Argentina 4555
    - *Pinus sylvestris,* foliage, Germany 4555
    - *Prosopis juliflora,* indicator plants, USA 1162
    - *Quercus robur,* dendrochronology, Sweden 6759
    - tolerance, *Populus,* shoot cuttings, Poland 7085
  - hydrogen peroxide, *Picea abies,* metabolic detoxification 6338

Air pollution *cont.*
  insect pests
    Anacampsis populella
      Populus, Russia 649
      Salix, Russia 649
    Bupalus piniarius
      Pinus sylvestris
        pest resistance, Germany 8335
        plant composition, Germany 8335
    Hymenoptera
      Betula, Russia 663
      Pinus, Russia 663
    Pristiphora abietina, Picea, Austria 7487
  lead
    Fagus sylvatica, plant composition, altitude, Germany 4567
    seasonal variation, *Populus nigra* var. *italica,* urban forestry, Italy 7992
  measurement
    estimation, *Pinus sylvestris,* leaf conductance, Sweden 7991
    Germany 7103
  mercury
    conifers, deposition, Canada 8854
    deposition
      coniferous forests
        Sweden 8851
        watersheds, Sweden 8853
    forest trees, foliage, gas exchange 8852
    Picea mariana
      growth rings, Canada 9737
      lichens, Canada 8832
  metabolic detoxification, *Picea abies,* foliage, enzymes 4705
  metals, trace elements, *Abies balsamea,* foliage, Canada 8833
  methane, *Quercus,* forest influences, USA 5359
  mixed forests, forest ecology, Slovakia 5329
  monitoring, Austria 2884
  nitrates, *Picea abies,* Germany 3649
  nitric oxide, *Picea abies,* foliage, biochemistry 3660
  nitrogen
    Betula, stand characteristics, USA 1155
    coastal plant communities, nitrogen cycle, USA 5304
    coniferous forests, USA 6356
    monitoring, *Pinus ponderosa,* USA 7986
    Picea abies
      soil fertility, yield forecasting, Sweden 7981
      yield tables, site class assessment, Germany 9602
    Quercus rubra, fertilizers, nutrient deficiencies, cycling, Netherlands 2617
    research projects 5241-5246, 5318-5323, 5580
      Europe 5305, 6329
  nitrogen cycle, soil chemistry, Europe, nitrogen, saturation 5322-5323
  nitrogen oxides
    altitude, Austria 7097
    conifers, France, measurement 1160
    global warming, Portugal, forecasting 3540
    Picea abies, nutrient deficiencies, plant nutrition 5327
  nitrogen retention
    deciduous forests, nitrogen cycle, USA 326
    Pinus resinosa, nitrogen cycle, USA 326
  organic compounds
    forest decline, reviews 8004
    Quercus, foliage, USA 7105
  organochlorine compounds, *Pinus sylvestris,* foliage, Germany 4556
  oxidants, *Picea abies,* peroxidases, Germany 3662

Air pollution *cont.*
  ozone
    Abies fraseri
      seedlings
        gas exchange 2888
        growth 2888
    Acer pseudoplatanus, forest litter, UK, decomposition 4572
    Acer saccharum, photosynthesis, canopy, USA 9752
    altitude, Austria 7097
    Betula pendula
      biochemistry, genetic variation 2880
      biomass production, plant physiology, diurnal variation 6191
      foliage
        anatomy, Finland 6336
        cuticle, absorption 3661
      nitrogen cycle, Finland 7096
    Betula pubescens, temperature, light, damage 9753
    broadleaves, forest litter, decomposition, USA 6344
    carbon dioxide enrichment, seedling growth 2874
    coniferous forests
      climate, USA 7102
      USA, geographical variation 8835
    conifers
      acid deposition, cycling 6347
      forest decline, reviews 7984
      France, measurement 1160
      nutrient deficiencies
        nutrition physiology 5326
        simulation, interactions 1976
      UK
        foliage
          leaching 4560
          microbial flora 4570
          nutrients 4559
        fumigation equipment 4189
        growth 4558
        metabolism 4562
        research 4574
    Cryptomeria japonica, simulation, growth 9747
    damage, *Pinus jeffreyi,* USA 4554
    deciduous forests, canopy, Canada, deposition 1168
    deposition, broadleaves, foliage 1171
    detection, *Picea abies,* phytol 6348
    disease resistance, *Pinus taeda,* fungal diseases, *Gibberella fujikuroi* var. *subglutinans* 8831
    estimation, *Pinus sylvestris,* leaf conductance, Sweden 7991
    Eucalyptus globulus, gas exchange, growth, effects 6498
    Fagus sylvatica, water stress, shoots, growth 3022
    forest influences, India 9760
    forest trees
      carbon dioxide enrichment, foliage, optical properties 9749
      drought, plant physiology 5325
      nutrient allocation
        simulation 1977
        stress factors, interactions 1975
      seedlings
        messenger RNA, induction 8185
        Switzerland 5311
    Fraxinus excelsior, water use 2881
    fungal diseases, *Mycosphaerella populorum, Populus* 'DN34', disease resistance 5644
    health, forestry workers, Germany 5045
    insect pests
      Cinara pilicornis, Picea abies, Switzerland 5693
      Schizolachnus pineti, Pinus sylvestris, plant composition 4035
    Liriodendron tulipifera, foliage, effects 2867
    methodology 2492
      equipment 23

Air pollution *cont.*
  ozone *cont.*
    mixed forests, forest influences, France, monoterpenes 1187
    Picea, UK, fungal diseases, resistance 4571
    Picea abies
      acid deposition, foliage 7988
      carbon dioxide enrichment, chromosome aberrations 4836
      enzyme activity, nutrient uptake 4708
      enzymes, induction 3801
      foliage
        chemistry 3652
        essential oils, Sweden 6446
        plant growth regulators, Germany, damage 2995
      frost resistance, biochemistry 2882
      gas exchange 2885
      plant physiology
        Austria 7099
        proteins 2868
      provenance
        frost resistance
          foliage
            reviews 9679
            UK 9679
      UK
        foliage, wettability 4563
        insect pests 4573
        plant physiology 4561
      water stress 3617
    Picea rubens
      acid deposition, USA, interactions 3667
      frost resistance, USA 2864
      plant composition, carbohydrates, nitrogen 6464
    Picea sitchensis
      canopy, deposition, UK 7987
      roots, cell division 7998
    Pinus, gas exchange, water stress 3002
    Pinus echinata, gas exchange, USA 340
    Pinus halepensis
      foliage, damage 3653
      photosynthesis 6256
      plant physiology 3646
    Pinus ponderosa
      acid deposition, enzymes 7093
      foliage, gas exchange, carboxylation 6497
      increment, diameter 4553
      water stress, plant nutrition, nitrogen 8105
    Pinus strobus, photosynthesis, methodology 3658
    Pinus sylvestris, molecular genetics 4566
    Pinus taeda
      acid deposition
        soil chemistry, heavy metals 8003
        soil enzymes
          plant nutrition 9738
          seedling growth 9738
      biochemistry 3657
      genetic variation, acid deposition, seedling growth 1963
      plant composition, biomass production, USA 1158
      water stress, increment, USA 7199
    Populus canadensis, biomass production 3654
    Populus 'Dorskamp', plant composition, carbohydrates 2879
    Populus maximowiczii × *Populus trichocarpa,* biochemistry 453
    Populus tremuloides
      nutrient deficiencies, nitrogen, photosynthesis 3023
      seedling growth, plant nutrition, nitrogen 9743
      water stress, photosynthesis 3023
    Prunus serotina, seedling growth, USA 9744

- **Air pollution** *cont.*
  - ozone *cont.*
    - *Pseudotsuga macrocarpa,* drought, increment, USA 7107
    - *Pseudotsuga menziesii*
      - plant physiology 2862
        - Netherlands 5312
      - soil water, translocation, carbon 1142
    - *Quercus robur,* photosynthesis 1969
    - *Quercus rubra*
      - foliage, plant physiology, seasonal variation 4703
      - microclimate, plant physiology 1965
      - plant physiology, age of trees 3648
    - resistance, *Pinus jeffreyi,* gas exchange 3001
    - reviews 9754
    - *Sequoiadendron giganteum,* plant physiology, USA 2068
    - uptake
      - damage, *Prunus serotina,* USA 7985
      - *Populus interamericana,* foliage 8495
  - *Picea abies*
    - acid deposition, Germany, measurement 6350
    - canopy, foliage, distribution, Czech Republic 7088
    - chromosome aberrations 6584
    - foliage
      - Austria 4674, 9750
      - chemistry, indicator plants, Sweden 1152
      - damage, Slovakia 9741
      - waxes, morphology, indicator plants 8050
    - forest decline
      - nitrogen cycle, Germany 3823
      - photosynthesis, Germany 2090
    - gas exchange, measurement, techniques, France 7654
    - genetic variation
      - forest decline, sampling, Italy 2191
      - phenotypes, enzymes, phosphoenolpyruvate carboxylase 9856
    - Germany 2850
    - mycorrhizas, Sweden 5580
    - nutrient deficiencies, plant physiology 5299
    - photosynthesis
      - foliage
        - shedding
          - Czech Republic 2878
          - simulation 5405
    - roots, biomass, Slovakia 7151
    - Russia, damage, simulation 7993
    - seed germination, chromosome aberrations, Slovenia 5335
    - soil chemistry
      - Denmark, ammonium nitrate 5244
      - nutrient deficiencies, Germany 9755
    - throughfall
      - precipitation, Switzerland, trace elements 4552
      - soil chemistry
        - Czech Republic 2863
        - Germany, nitrogen 5241
    - water stress, foliage, Germany 449
  - *Picea rubens,* throughfall, USA 2870
  - *Picea sitchensis*
    - soil chemistry, plant water relations, UK, nitrates 5243
    - throughfall, soil chemistry, UK, nitrates 5242
  - *Pinus*
    - bark, lichens, Finland, chemistry 7996
    - pollen germination, Slovakia 7212
  - *Pinus pinea,* foliage, Italy, waxes, damage 5341
  - *Pinus ponderosa,* throughfall, USA 8845

- **Air pollution** *cont.*
  - *Pinus radiata*
    - foliage
      - nutrient deficiencies, major elements 1948
      - waxes, indicator plants, New Zealand 3754
  - *Pinus strobus,* foliage, USA, reviews 2872
  - *Pinus sylvestris*
    - amenity and recreation areas, increment, Belarus 6326
    - climate, Finland, measurement 5324
    - cycling, sulfur, UK, methodology 3629
    - foliage
      - antioxidants, Germany 6337, 6355
      - chemistry, indicator plants, Sweden 1152
      - cuticle, waxes 2045
      - enzymes, glutamate dehydrogenase, Germany 6479
      - forest decline, Finland 7092
    - forest decline, Poland 2873
    - forest health, Russia, Finland, monitoring 9858
    - forest influences, understorey, Russia 341
    - forest litter, decomposition, Poland 7050
    - lichens, indicator plants, Norway, distribution 1390
    - photosynthesis
      - Belarus 6352
      - carbon dioxide, Russia 2886
      - water stress, Russia 9751
    - plant composition, Russia 4568
    - plant nutrition, Russia 7094
    - Poland, mapping, monitoring 1153
    - provenance trials, increment, Poland 6030
    - Russia, monitoring 9740
    - soil chemistry, Netherlands, nitrogen, sulfur 3665
    - wood chemistry, trace elements, extractants, Germany 9843
  - plant physiology, simulation, stress factors, interactions 1974
  - pollen, allergens, South Africa 9409
  - *Populus*
    - foliage, senescence, chemistry, raffinose 334
    - senescence, chemistry, *myo*-inositol 4549
  - pulp and paper industry, *Pinus sylvestris,* foliage, Finland 5314
  - *Quercus,* forest decline, soil chemistry, plant nutrition, Austria 5309
  - *Quercus petraea,* wood chemistry, heavy metals, Germany, methodology 7653
  - *Quercus robur,* wood chemistry, heavy metals, forest decline, Poland 7095
  - radionuclides
    - *Acer rubrum,* canopy, interception, pot experimentation 8844
    - forest ecology, Europe, conferences 4177
    - *Picea rubens,* canopy, interception, pot experimentation 8844
  - resistance
    - *Abies alba,* foliage, provenance, Italy 6330
    - amenity and recreation areas, Russia, choice of species 5905
  - salt spray
    - *Cryptomeria japonica,* topography, Japan, damage 4475
    - forest treees, soil toxicity, Denmark 8000
    - *Picea sitchensis,* streams, UK, water quality 7874
    - *Pinus halepensis*
      - coastal plant communities, France, damage 6353
      - forest decline, France 1172
  - site types, Germany 8846
  - smelters, *Prosopis juliflora,* foliage, USA 8842

- **Air pollution** *cont.*
  - soil biology, carbon dioxide enrichment, reviews 6295
  - soil chemistry, acidification, simulation, UK 7683
  - sulfates
    - forest trees, Slovakia, seasonal variation 7087
    - *Pinus sylvestris,* bark, Europe 8848
  - sulfur dioxide
    - *Acer pseudoplatanus,* forest litter, UK, decomposition 4572
    - *Acer saccharinum,* nutrient transport, sucrose, metabolism 7181
    - *Betula papyrifera,* biochemistry, detoxification 3779
    - coniferous forests, Canada, simulation 6346
    - conifers
      - foliage, Germany 5315
      - France, measurement 1160
      - photosynthesis, reviews 1957
      - seedlings, foliage, physiology 8107
      - UK
        - foliage
          - leaching 4560
          - microbial flora 4570
          - nutrients 4559
        - fumigation equipment 4189
        - growth 4558
        - metabolism 4562
        - research 4574
    - deciduous forests, canopy, Canada, deposition 1168
    - estimation, *Pinus sylvestris,* leaf conductance, Sweden 7991
    - forest trees, growth, plant composition 3663
    - *Picea*
      - photosynthesis, simulation, Canada 1973
      - UK, fungal diseases, resistance 4571
    - *Picea abies*
      - Europe 4565
      - Germany 9864
        - uptake 7983
      - nutrient deficiencies, plant nutrition 5327
      - seedlings, nitrogen, metabolism 7995
      - UK
        - foliage, wettability 4563
        - insect pests 4573
        - plant physiology 4561
    - *Picea rubens*
      - foliage, Canada 8856
      - photosynthesis 1979
    - *Pinus massoniana*
      - forest decline, China 3669
      - photosynthesis, foliage, chemistry 3669
    - *Pinus pinaster,* chloroplasts, ultrastructure, Spain 3727
    - *Pinus sylvestris*
      - biochemistry, enzymes, Germany 2883
      - foliage, plant physiology 3789
      - gas exchange, Finland, simulation 6351
      - seedlings
        - foliage
          - damage 1164
          - phenolic compounds 7086
    - *Populus,* foliage, damage, phenolic compounds 1161
    - *Populus deltoides,* foliage, photosynthesis, nutrient uptake 7183
    - *Robinia pseudoacacia,* foliage, photosynthesis, nutrient uptake 7182
    - *Schima superba,* Taiwan, seedling growth, physiology 7997
    - street trees, salt injury, Europe 3644
  - susceptibility
    - plant physiology
      - *Mangifera indica,* India 2876
      - *Psidium guajava,* India 2876
  - tolerance
    - *Betula*
      - provenance trials, Poland 1150

- **Air pollution** *cont.*
  - tolerance *cont.*
    - *Betula cont.*
      - reviews 1149
      - species trials, Poland 1150
    - forest trees, urban forestry, India 2875
    - *Pinus* 7083
  - traffic, broadleaves, indicator species, India 5316
  - urban forestry, carbon cycle, USA 4134
  - vehicles
    - *Picea abies,* defoliation, Sweden, aerial photography 1167
    - *Pinus radiata,* forest decline, Spain 1166
  - volatile compounds
    - forest trees, USA 3740-3741
    - global warming, Portugal, forecasting 3540
    - *Picea abies*
      - foliage
        - Germany, insecticide residues 6342
        - residues 5334
    - *Pinus pinea,* forest influences 8865
  - wildlife, small mammals, boreal forests, Russia 8370
  - woody plants, UK, susceptibility 3651
  - zinc, *Rhus hirta,* foliage, chemistry, USA 9748
- **Air temperature**
  - *Pinus,* clear felling, USA 5349
  - *Pseudotsuga menziesii,* forest borders, simulation, USA 2793
- **Aircraft,** microlight aircraft, fire detection, Russia 5361
- ***Aix sponsa,*** birds, cavities in trees, USA, nesting 6686
- ***Alangium***
  - taxonomy
    - Sabah 7229
    - Sarawak 7229
- **Albania**
  - broadleaves, degraded forests, reclamation 6707
  - forest resources 7692
  - forestry, statistics 9377
  - insect pests, *Lauritrioza alacris, Laurus nobilis,* control 5807
  - legislation, forest economics, forest policy 2528
- ***Albizia,*** insect pests, *Acizzia uncatoides,* USA, biological control 7509
- ***Albizia amara***
  - mistletoes
    - *Dendrophthoe falcata,* India 2295
    - *Viscum orientale,* India 2295
- ***Albizia chinensis***
  - fruits, morphology, seeds, morphology, seed germination 6075
  - fungal diseases, *Ravenelia sessilis,* forest nurseries, India 605
  - wood anatomy 402
- ***Albizia coriaria,*** agroforestry, indigenous knowledge, Uganda, theses 9282
- ***Albizia falcata*** (*see Paraserianthes falcataria)*
- ***Albizia ferruginea***
  - mycorrhizas, *Glomus aggregatum,* plant nutrition, phosphorus 5612
  - ultisols, fertilizers, seed size, pot experimentation 7758
- ***Albizia julibrissin***
  - agroforestry, cycling, USA 10116
  - micropropagation, culture media 89
- ***Albizia lebbeck***
  - *Acacia xanthophloea,* allelopathy, crops 8176
  - agroforestry
    - Australia 6729
    - coppice, Burkina Faso 10117
  - allelopathy
    - crops 545
    - foliage, extracts 3106
  - branching, habit, India 2037
  - cambium, cell division, seasonal variation 4644
  - canopy, increment, diameter, Australia 1821
  - coppice, biomass production, India 8620
- ***Albizia lebbeck*** *cont.*
  - forest plantations, roots, distribution, India 2952
  - fruits, morphology, seeds, morphology, seed germination 6075
  - fuel plantations
    - diameter, India, equations 1615
    - height, India, equations 1615
  - insect pests, India, biological control 5806
  - parasitic plants, *Santalum album,* increment, India 186
  - reclamation, mined land, India, economics 3248
  - seed collection, seed treatment, seed germination, India 1680
  - seed germination
    - seed treatment 85
      - India 858
    - seedling growth, copper, iron, soil pollution 304
  - seedling growth, photosynthesis, foliage, India 1261
  - seedlings
    - nitrogen fixation, measurement 8265
    - root nodules, *Rhizobium,* arid soils, India 2234
  - short rotation forestry, biomass production, India 1736
  - species trials
    - India 1664
    - mangrove forests, Bangladesh 6017
    - reclamation
      - fly ash, India 9248
      - mined land, Cuba 1540
      - sodic soils, India 712
  - wood anatomy 402
- ***Albizia lophantha,*** foliage, nastic movements, biochemistry, light 1277
- ***Albizia lucida***
  - air layering 2607
  - fruits, morphology, seeds, morphology, seed germination 6075
  - wood anatomy 402
- ***Albizia niopoides,*** wood anatomy 402, 4629
- ***Albizia odoratissima***
  - fodder, choice of species, Nepal 6948
  - fruits, morphology, seeds, morphology, seed germination 6075
  - wood anatomy 402
- ***Albizia procera***
  - forest nurseries
    - containers, seedling growth, survival, Bangladesh 6076
    - mulches, irrigation, India 4313-4314
    - nitrogen fertilizers, plant growth regulators, India 9474
  - fruits, morphology, seeds, morphology, seed germination 6075
  - micropropagation 8577
  - reclamation, mine spoil, fertilizers, India 9250
  - root cuttings, Bangladesh 6045
  - seed germination
    - irrigation, distillery effluent, India 6879
    - seed treatment
      - India 858
      - seed dormancy 7729
  - shade trees, crops, spacing, Cuba 1557
  - species trials
    - mangrove forests, Bangladesh 6017
    - reclamation, mine spoil, India 4949
  - wood anatomy 402
- ***Albizia purpusii,*** wood anatomy 4629
- ***Albizia richardiana,*** fruits, morphology, seeds, morphology, seed germination 6075
- ***Albizia saman***
  - agroforestry, Haiti 1563
  - plant morphology, meiosis, India, variation 4650
  - plant parasitic nematodes, *Meloidogyne,* shade trees, crops, Cuba 1496
  - seed germination, seed treatment, India 858
  - seedling growth, photosynthesis, foliage, India 1261
  - species trials
    - mangrove forests, Bangladesh 6017
    - reclamation, mined land, Cuba 1540
- ***Albizia stipulata,*** agroforestry, biomass production, cycling, India 8432
- ***Albizia zygia,*** degraded forests, reclamation, natural regeneration, Ghana 8390
- ***Albosynnema elegans,*** endophytes, *Poulsenia armata,* branches, Costa Rica 9067
- ***Alces alces***
  - deer
    - *Betula alba,* stand development, Russia 7530
    - browsing, reviews, ecology 7523
    - Canada, telemetry, global positioning systems 9208
    - forest management, multiple use, hunting, Canada 9219
    - *Pinus sylvestris*
      - browse, Sweden 10069
      - browsing, Sweden, simulation 10071
      - browsing damage, Finland 7519
    - site preparation, herbicides, USA 9229
  - weed control, woody weeds, Norway 10070
  - wildlife
    - broadleaves, browse, forests, Poland 7534-7535
    - browse, boreal forests, USA 3214
- ***Alchornea cordifolia,*** browse plants, insect pests, Nigeria 8325
- ***Alchornea grandiflora,*** cloud forests, clear felling, plant succession, Venezuela 5458
- ***Alchornea latifolia***
  - plant colonization, landslides, Jamaica 4793
  - rain forests, Mexico, wood anatomy 1211
- ***Alectoris chukar,*** birds, USA, introduced species, ecology 7527
- ***Alepis flavida,*** mistletoes, *Nothofagus solandri,* New Zealand 4878
- ***Aleurites fordii,*** insect pests, Pakistan, seeds 5679
- ***Aleurites moluccana***
  - rain forests, seeds, survival, predation, Australia 4050
  - species trials, firebreaks, Indonesia 2000
- **Algae,** epiphytes, *Avicennia marina,* mangrove forests, South Africa 7301
- **Algeria**
  - agroforestry, sustainability 5869
  - dunes 3927
  - forest trees, fertilizers, increment 900
  - insect pests, *Psylliodes ruficolor, Quercus ilex,* new species 659
  - medicinal plants 7807
  - *Pinus halepensis,* forest nurseries, weed control 5116
  - scrub 3927
- ***Alibertia edulis,*** foliage, chemistry, triterpenoids 8086
- **Alkalinity,** tolerance, *Eucalyptus,* seedlings, salt tolerance 2065
- **Allelochemicals,** bioassays 544
- **Allelopathy**
  - *Acacia nilotica,* agroforestry, India 7316
  - *Acacia xanthophloea,* multipurpose trees, crops 8176
  - agroforestry, reviews 7319
  - *Casuarina equisetifolia* 7317
  - crops, multipurpose trees 545
  - *Elaeagnus angustifolia,* forest litter, soil, nitrification 1897
  - *Eucalyptus* 2158
    - agroforestry, reviews 7318
  - *Eucalyptus globulus,* foliage, extracts 8175
  - forest trees, plant composition, forest litter, Spain 7315
  - forestry, conferences 7644
  - multipurpose trees, foliage, extracts 3106
  - mycorrhizas, *Pinus sylvestris,* foliage, extracts 2245
  - *Myrica cerifera, Pinus taeda,* plant succession, light 7314
  - *Picea abies*
    - natural regeneration
      - France, understorey 2162
      - mycorrhizas, humus 5270
    - seedlings, France 3105

Allelopathy *cont.*
- *Pinus patula,* afforestation, agricultural land, nutrient deficiencies, South Africa 154
- *Pinus sylvestris*
  - seed germination, seedling growth, plant extracts, *Pteridium aquilinum* 5464
  - seedling growth, weeds, plant competition, Sweden 1759
- *Populus tremula,* seed germination, seedling growth, plant extracts, *Pteridium aquilinum* 5464
- *Prosopis cineraria,* seedling growth, multipurpose trees, foliage, extracts 2161
- *Prosopis juliflora,* plant extracts 9955
- research, Slovakia 7320
- *Robinia pseudoacacia,* crops 546
- *Shorea,* seedling growth, *Acacia mangium,* soil, Indonesia 2159
- *Shorea palembanica,* seedling growth, *Eucalyptus,* extracts 2160
- woody plants, reviews 8174

Allocasuarina decaisneana, epidermis, crystals, calcium oxalate 5382

Allocasuarina huegeliana, farm forestry, choice of species, direct sowing, Australia 10121

Allocasuarina lehmanniana, epidermis, crystals, calcium oxalate 5382

Allocasuarina littoralis
- mycorrhizas
  - *Pisolithus* 5610
  - *Scleroderma* 5610

Allocasuarina stricta, root nodules, *Frankia,* Uruguay, nitrogenase 1443

Allocasuarina torulosa
- epidermis, crystals, calcium oxalate 5382
- root nodules, *Frankia,* Uruguay, nitrogenase 1443

Allocasuarina verticillata
- epidermis, crystals, calcium oxalate 5382
- provenance trials, drought resistance, soil fertility, Israel 6013

Allometry
- forest trees, biomass, equations, USA 4195
- mangroves, plant morphology, Peninsular Malaysia 6427
- rain forests, seedlings, development, Japan 2943
- *Robinia pseudoacacia,* stem form, taper, USA 6409

Allophylus cobbe, stem form, buttresses, plant competition, Papua New Guinea 3876

Allophylus varians, foliage, Sri Lanka, chemical composition 3751

Allosyncarpia ternata, mortality, rain forests, forest fires, Australia 3113

Alluaudia comosa, Arid Regions, stand structure, natural regeneration, Madagascar 8998

Alnetoidia alneti, insect pests, broadleaves, UK 5690

Alnus, wind damage, Netherlands 1062

Alnus acuminata
- choice of species, forestry development, South America, handbooks 2551
- chromosome number, Latin America 2222

Alnus cordata
- clones, grafting, Italy, growth 8579
- forest plantations, mixtures, Italy, growth 8626
- fungal diseases, *Phytophthora cambivora,* UK, distribution 3164
- mycoplasmal diseases, Italy 5668
- mycorrhizas, *Glomus,* interactions, nitrogen fixing bacteria, *Frankia* 9079
- nitrogen fertilizers, foliage, labelling 8081
- nitrogen fixing bacteria, *Frankia,* interactions, mycorrhizas, *Glomus* 9079
- provenance trials, USA, frost resistance, pest resistance 4255
- reclamation
  - landfills, species trials, plant nutrition, UK 4948

Alnus cordata *cont.*
- reclamation *cont.*
  - mine spoil
    - Italy, symbiosis 2406
    - UK, soil amendments 6708
- root nodules, *Frankia,* foliage, France, nutrients 1909
- seeds, Italy, seed collection, viability, storage 8571
- thinning, Italy, growth 1772

Alnus crispa, fertilizers, mulching, seedling growth, Canada 6116

Alnus firma
- photosynthesis, plant water relations, diurnal variation 3783
- root nodules, *Frankia,* Japan, inoculation 4010

Alnus glutinosa
- endophytes, *Phialocephala compacta,* Germany 9068
- forest decline, France 3817
- forest litter, decomposition, fungi, Germany 8784
- forest nurseries, soil sterilization, UK 2620
- forest plantations, wood chemistry, USA 8919
- fungal diseases, *Phytophthora cambivora,* UK, distribution 3164
- groundwater, soil chemistry, geographical information systems, Germany 8163
- insect pests
  - *Alnetoidia alneti,* UK 5690
  - *Chrysomela lapponica,* plant composition 2352
  - Lepidoptera, Germany 10042
- mined land, Germany, clay soils 1538
- mixtures, stand establishment, cover crops, fertilizers, Germany 6923
- mycoplasmal diseases, Italy 5668
- nitrogen cycle, USA, measurement, nitrification 3621
- nitrogen fixation, carbon dioxide enrichment 4527
- nitrogen fixing trees, pruning, plant physiology, plant composition, growth 8096
- plant succession
  - Russia, clear felling 5462
  - synecology, Sweden 1397
- provenance, Germany 9422
- provenance trials
  - Korea Republic, growth, survival 7721
  - USA, frost resistance, pest resistance 4255
- reclamation
  - landfills
    - species trials
      - plant nutrition, UK 4948
      - UK 4947
  - mine spoil, UK, soil amendments 6708
- rhizosphere, soil bacteria, seasonal variation, nitrogen cycle, Spain 1923
- riparian forests, Spain, classification 4772
- root nodules
  - *Frankia* 8278
    - Netherlands, resistance 4852
    - nitrogen fixation 8264
    - UK, soil inoculation 2620
    - USA 4848
  - Hyphomycetes 8278
  - inoculation 4841
  - Zygomycetes 8278
- swamps, peatlands, synecology, Latvia 1381
- vegetation types, soil types, Russia 300
- vegetative propagation 4288
- wildlife, *Alces alces,* browse, forests, Poland 7534
- yield tables, Germany 8713

Alnus hirsuta
- root nodules, *Frankia,* Japan 9999
- seedlings, phenology, carbon dioxide enrichment, temperature, soil fertility 7864
- soil air, carbon dioxide, snow cover, Japan 8768

Alnus incana
- biomass production, roots, growth, Sweden 6189
- forest litter, decomposition, Sweden 6281
- fungal diseases, *Phytophthora cambivora,* UK, distribution 3164
- insect pests, Lepidoptera, Germany 10042
- mined land, Germany, clay soils 1538
- natural regeneration, clear felling, Sweden 3439
- nitrogen fertilizers, foliage, labelling 8081
- nitrogen fixation, climatic factors, diurnal variation 3015
- root nodules
  - *Frankia,* foliage, France, nutrients 1909
  - lipids, nitrogen fixation, gas exchange 5587
  - *Penicillium nodositatum,* infection, root hairs 599
- short rotation forestry, thinning, Sweden 7769
- taxonomy, new taxa, Finland 498
- water stress, root nodules, nitrogenase, photosynthesis 7943

Alnus japonica
- degraded forests, forest decline, urban areas, Korea Republic 9312
- pollen, allergens, Japan 5046
- seedlings, flooding, growth effects 6361

Alnus jorullensis, chromosome number, Latin America 2222

Alnus matsumurae, insect pests, *Heterarthrus alnivorus,* Japan 665

Alnus maximowiczii, insect pests, *Heterarthrus subflavipes,* Japan 665

Alnus nepalensis
- agroforestry, cycling, India 4119
- forest plantations, nitrogen cycle, India 4531
- mites, *Eriophyes,* galls, India 2371
- plant nutrition, cycling, India 1947
- tissue culture, explants, culture media 112

Alnus rubra
- biogeochemistry, cycling, USA 2814
- biology, books 6784
- forest nurseries, herbicides, UK, tolerance 2644
- genetic variation, plant physiology, Canada 5478
- girdling, weed control, biological control, Canada, *Chondrostereum purpureum* 3451
- mycorrhizas, host specificity 5603
- provenance trials, increment, France 836
- reproductive behaviour, irrigation, spacing, fertilizers, USA 9869
- root nodules, *Frankia,* forest nurseries, USA, soil pH 2231
- seedling growth, photosynthesis, nitrogen fixation, temperature, plant water relations 1294
- seedlings, carbon dioxide enrichment, drought 7190
- silviculture, books 6784
- soil chemistry, nitrates, USA 3577
- thinning, increment, USA 5150
- weed control, biological control, Canada, *Chondrostereum purpureum* 3451
- woody weeds, control, forest plantations, *Pseudotsuga menziesii,* USA 1764

Alnus serrulata, root nodules, histology 5586

Alnus sinuata, plant succession, USA 3095

Alnus subcordata
- root nodules, *Frankia,* foliage, France, nutrients 1909
- silvicultural characters, Iran, species trials, France 7147

Alnus tenuifolia
- gibberellins 3795
- nitrogen cycle, plant succession, USA 6318

Alnus viridis, choice of species, protection forests, avalanches, Germany 6869

Alouatta seniculus, monkeys, *Chrysophyllum lucentifolium,* seed dispersal, French Guiana, interactions 7541

- ***Alphitonia petriei,*** reclamation, direct sowing, Australia 8395
- ***Alseis yucatanensis,*** liberation felling, Mexico, girdling, poisoning 2648
- ***Alstonia boonei,*** rain forests, forest litter, chemistry, decomposition, Nigeria 3578
- ***Alstonia scholaris,*** wood anatomy 401
- ***Alternaria,*** fungal diseases, *Eucalyptus globulus,* plant physiology 3771
- ***Altica bimarginata***
  - insect pests
    - *Salix cordata*
      - dunes, plant succession 5742
      - foliage, morphology 5744
      - resistance, genetic variation 5747
- ***Altica quercetorum,*** insect pests, *Quercus,* Spain 5760
- **Altitude**
  - air pollution, Austria 7097
  - *Chamaecyparis nootkatensis,* frost resistance, provenance, Canada 1083
  - clear felling, site preparation, soil water regimes, Canada 3447
  - coniferous forests
    - botanical composition, latitude, USA 4770
    - forest ecology, Guatemala 5448
  - conifers
    - choice of species, afforestation, France 9421
    - plant competition, USA 1895
    - plant water relations, isotope fractionation 2834
  - deciduous forests, synecology, India 1365
  - *Eucalyptus globulus*
    - essential oils, age of trees, India 9568
    - increment, photosynthesis, India 9682
  - *Eucalyptus pauciflora,* biomass distribution, Australia 4484
  - *Fagus sylvatica,* air pollution, lead, plant composition, Germany 4567
  - forest trees
    - geographical distribution, India 1356
    - water use efficiency, North America 4513
  - landslides, natural regeneration, seed dispersal, wind, Japan 3226
  - *Larix decidua,* stomata, Austria, ozone, uptake 7187
  - *Larix leptolepis,* phenology, Japan 8889
  - *Larix olgensis,* stand characteristics, Korea Democratic People's Republic 1817
  - mixed forests, synecology, India 1365
  - mountain forests, synecology, Slovenia 5444
  - *Picea abies,* humus, soil biology, France 3588
  - *Picea rubens,* geographical distribution, USA 2138
  - *Pinus nigra,* epiphytes, lichens, Greece 3945
  - *Pinus sylvestris*
    - frost resistance, latitude, Sweden 5233
    - growth, photosynthesis, treelines, UK 2807
  - rain forests
    - biomass, volcanoes, USA 3103
    - plant succession, volcanoes, USA 3103
    - synecology, USA 3918
  - scrub, synecology, India 1365
  - secondary forests, synecology, India 1365
  - stand characteristics, biomass production, India 3052
  - vegetation types
    - soil types, Japan, mountain forests 9925
    - synecology
      - forest fires, USA 3053
      - USA 6526
  - zoning, cloud forests, synecology, land use, Nepal 1371
- ***Amanita,*** mycorrhizas, forest trees, Nepal 7386
- ***Amanita muscaria***
  - mycorrhizas
    - *Picea abies*
      - cell culture, plant physiology 447
      - induction, cell culture, callus 8258
- ***Amanita muscaria*** *cont.*
  - mycorrhizas *cont.*
    - *Picea abies cont.*
      - seedlings, enzymes 7393
- ***Amanita spissa,*** mycorrhizas, *Pinus halepensis* 8285
- ***Amanoa caribaea***
  - gas exchange, light, Guadeloupe, adaptation 4682
  - wind damage, Guadeloupe, resistance 1063
- ***Amata passalis,*** insect pests, *Santalum album,* India, parasitoids 641
- **Amazonia**
  - Arecaceae
    - books 7620
    - geographical distribution 5048
  - deforestation
    - climate, simulation 3255
    - soil pore system 1899
  - forest trees, endangered species, logging 1174
  - Isoptera, forest litter 5678
  - rain forests
    - deforestation 532
    - nature conservation 532
  - reclamation, afforestation, plant succession, deforestation 7557
  - *Swietenia macrophylla,* logging, forest economics, deforestation 7568
- ***Amblypelta lutescens,*** insect pests, *Murraya paniculata,* Australia, parasitoids 2311
- ***Amburana cearensis,*** endangered species, Paraguay 1577
- ***Amelanchier,*** ornamental woody plants, silvicultural characters, Canada 2436
- **Amelioration of forest sites**
  - coniferous forests, ground vegetation, Germany 8166
  - degraded forests, site types, increment, Poland 4089
  - *Picea abies,* nutrient deficiencies, magnesium, Austria 7754
  - *Pinus sylvestris,* fertilizers, Germany 8592
- **Amenity and recreation areas**
  - afforestation, valuation, Spain 8448
  - air pollution, resistance, Russia, choice of species 5905
  - forest economics, multiple use, Germany 1049
  - forest trees, USA, hazards, analysis 8455
  - *Pinus sylvestris,* air pollution, increment, Belarus 6326
  - Russia, forest inventories 1584
  - urban areas, USA, design 8461
  - veteran or remarkable trees, Moldova 6757
- **Amenity forests**
  - management
    - *Pinus,* agroforestry, forest fires, France 5877
    - *Quercus suber,* agroforestry, forest fires, France 5877
  - urban forestry, forest ownership, Norway, public opinion 10134
- **Amenity trees**
  - abiotic injuries, UK, books 6
  - assessment 2437
  - bacterial diseases
    - control, arboriculture 10016
    - UK, books 6
  - broadleaves, urban forestry, Germany 2432
  - buildings, foundations, UK, damage, reviews 7609
  - forest resources, landscape, plant genetic resources 2433
  - fungal diseases
    - *Seiridium cardinale,* Cupressaceae, Germany 9111
    - UK, books 6
  - insect pests, UK, books 6
  - landscape, urban areas, Japan 10157
  - plant parasitic nematodes, UK, books 6
  - plant pathogenic bacteria, *Xylella fastidiosa,* USA 2286
- **Amenity trees** *cont.*
  - planting
    - planning
      - urban areas
        - UK
          - standards 10139
          - surveys 10139
  - *Populus simonii,* frost injury, Estonia 5904
  - root systems, interactions, building construction, UK, standards 10140
  - site factors, climate, soil, adaptation, selection criteria 4984
  - tree guards 742
  - urban forestry, street trees, USA 740
  - viral diseases, UK, books 6
  - water use
    - clay soils
      - buildings
        - databases, UK 10146
        - foundations, UK 10145
    - USA 7059
- **Amenity value of forests** (*see also* Forest recreation)
  - buildings, valuation, UK 9374
  - Italy 8447
  - non-wood forest products, valuation, Sweden 9650
  - private forestry, landscape, Finland, methodology 10136
- **America**
  - insect pests, *Heteropsylla cubana, Leucaena leucocephala* 7444
  - mangroves, palaeobotany, reviews 6528
- ***Amomyrtus luma,*** rain forests, seed size, recruitment, Chile 7258
- ***Amoora rubiginosa,*** wood anatomy, Indonesia 6407
- ***Amorpha fruticosa,*** bottomland forests, natural regeneration, wild pigs, agroforestry, Croatia 3268
- ***Ampelocera hottlei,*** rain forests, Mexico, wood anatomy 1211
- ***Amyema miquelii***
  - mistletoes
    - *Eucalyptus,* Australia, control 4879
    - *Eucalyptus salmonophloia,* Australia, spatial distribution 7413
- ***Amyema preissii,*** mistletoes, broadleaves, host parasite relationships, seed germination, seedling growth 5674
- ***Anacampsis populella***
  - insect pests
    - *Populus,* air pollution, Russia 649
    - *Salix,* air pollution, Russia 649
- **Anacardiaceae**
  - checklists, Thailand 3862
  - taxonomy, seeds 3720
- ***Anacardium,*** species trials, reclamation, mined land, Venezuela 6711
- ***Anacardium excelsum***
  - forest litter, decomposition, drought, Panama 1916
  - transpiration, humidity, Panama 3614
  - wood anatomy, wood properties 6428
- ***Anacardium occidentale***
  - agroforestry, India, economics 725
  - forest plantations, sand dune stabilization, Senegal 4939
  - reclamation, eroded soils, community forestry, choice of species, Indonesia 3237
  - species trials, reclamation, mined land, Cuba 1540
- ***Anadenanthera macrocarpa,*** plant water relations, water stress, seedling growth 1111
- ***Anaglyptus subfasciatus,*** insect pests, conifers, Japan, attractants 4040
- ***Anas platyrhynchos,*** birds, USA, habitats 6682
- ***Anas rubripes,*** birds, USA, habitats 6682
- **Anatomy** (*see* Plant anatomy; Wood anatomy)
- ***Anaxagorea dolichocarpa***
  - crown, morphology 404
  - root systems, morphology 404
- ***Andira,*** chloroplast genetics, phylogeny, taxonomy 6600
- ***Andira inermis,*** plant water relations, drought, phenology, Costa Rica 2838

- ***Andricus californicus,*** insect pests, *Quercus,* USA, host parasite relationships 2362
- ***Andricus quercuscalicis,*** insect pests, *Quercus cerris,* spread, population genetics 2360
- ***Anemopsis californica,*** wood anatomy, phylogeny 8073
- **Angiosperms,** woody plants, palaeoecology, Antarctica 8143
- **Angle count,** sampling, errors 8730
- **Angola,** *Colophospermum mopane,* geographical distribution, site factors, vegetation types 6535
- ***Angophora floribunda,*** natural regeneration, artificial regeneration, farm forestry, Australia 7687
- ***Aningeria adolfi-friederici,*** water stress, stomata, responses 5278
- ***Anisogramma anomala,*** fungal diseases, *Corylus avellana* 8312
- ***Anisophyllea,*** mangroves, epidermis, morphology, taxonomy, Nigeria 3724
- ***Annona muricata,*** phenology, flowering, fruiting, Venezuela 5368
- ***Annona squamosa***
  - foliage, extractives, bioassays 6444
  - seed oils, properties 7172
- **Annonaceae**
  - medicinal plants
    - Africa 200
    - South America 200
- **Annual rings** (*see* Growth rings)
- ***Anodopetalum biglandulosum,*** habit, synecology, canopy gaps, Australia 2012
- ***Anogeissus acuminata,*** tissue culture, explants, culture media 3402
- ***Anogeissus latifolia,*** seed germination, seed treatment, temperature 81
- ***Anogeissus pendula,*** deciduous forests, synecology, remote sensing, India 9638
- ***Anopyxis,*** mangroves, epidermis, morphology, taxonomy, Nigeria 3724
- **Antarctica**
  - angiosperms, woody plants, palaeoecology 8143
  - *Jeffersonioxylon gordonense,* taxonomy, new taxa, wood anatomy 8072
- ***Antheraea polyphemus polyphemus,*** silkworms, carbon dioxide enrichment, *Betula papyrifera,* food plants 8683
- ***Antheraea yamamai,*** insect pests, *Quercus,* China, biology 7457
- ***Anthocephalus,*** Indonesia, wood chemistry 2059
- ***Anthocephalus cadamba*** (*see Anthocephalus chinensis*)
- ***Anthocephalus chinensis***
  - Indonesia, wood chemistry 2059
  - wood anatomy 401
- ***Anthonomus varians,*** insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
- ***Antidesma cuspidatum,*** plant nutrition, plant succession, Singapore 4543
- **Antifungal plants,** reviews 203
- **Ants** (*see* Formicidae)
- ***Aonidia lauri,*** insect pests, *Laurus nobilis,* Italy, life cycle 9140
- ***Apeiba membranacea,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Aphananthe monoica,*** rain forests, Mexico, wood anatomy 1211
- ***Aphelenchus avenae,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- **Aphididae,** insect pests, *Pinus mugo,* Italy 9143
- ***Aphis,*** insect pests, ornamental woody plants, biological control, natural enemies 4899
- ***Aphrophora paguma,*** insect pests, *Pinus luchuensis,* Japan 7434
- **Apical meristems,** *Pinus taeda,* cell division, methodology 780
- **Apiculture** (*see* Beekeeping; Honey bees)
- **Apidae**
  - behaviour, *Clusia nemorosa,* flowers, Brazil 9883
  - conservation, ecology, tropical forests, pollination, Brazil 6643
- **Apidae** *cont.*
  - forest trees, pollination, Argentina, landscape ecology 1470
  - insecticides, nontarget effects 8353
- ***Apiognomonia errabunda,*** fungal diseases, *Fagus sylvatica,* infection 5664
- ***Apiognomonia veneta,*** fungal diseases, *Platanus acerifolia,* USA, disease resistance 2284
- **Apocynaceae,** fruits, anatomy, identification, taxonomy 7157
- ***Apodemus flavicollis,*** rodents, *Fagus sylvatica,* Spain 10060
- ***Apodemus sylvaticus,*** mammals, *Juniperus thurifera,* seed dispersal, Spain 2387
- ***Apoderus tranquebaricus,*** insect pests, *Terminalia arjuna,* India, damage 650
- ***Apodytes***
  - bark, taxonomy, anatomy 399
  - fruits, anatomy, Southern Africa 2961
- ***Apodytes abbottii,*** taxonomy, new species, botany, South Africa 3849
- ***Apodytes dimidiata,*** broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223
- ***Apodytes geldenhuysii,*** taxonomy, new species, botany, South Africa 3849
- ***Apogonia expeditionis,*** insect pests, *Paraserianthes falcataria,* Indonesia, chemical control 8349
- ***Apollonias barbujana***
  - silvicultural characters, Canary Islands 8888
  - species trials, rehabilitation, Canary Islands 6032
- ***Apoplanesia paniculata,*** deciduous forests, forest litter, Mexico 293
- ***Aporosa villosa,*** wood anatomy, rays 2029
- **Aquaculture,** *Rhizophora mucronata,* agroforestry, Indonesia 1528
- **Aquatic environment,** dead trees, ecology, USA, books 4156
- **Aquatic fungi,** broadleaves, endophytes, Pakistan 8253
- **Aquatic invertebrates,** forest fires, streams, USA 8033
- ***Aquilaria malaccensis,*** non-wood forest products, forest economics, Peninsular Malaysia 963
- **Arab countries,** medicinal plants, books 3295
- ***Aralia bipinnata***
  - wood chemistry
    - lignans 9840
    - phenolic compounds 9837
- ***Aralia elata,*** medicinal plants, callus, adventitious roots 6053
- ***Araucaria,*** palaeobotany, Asia 4646
- ***Araucaria angustifolia,*** pollen analysis, geographical distribution, climate, Brazil 2129
- ***Araucaria araucana***
  - deforestation, nature conservation, Chile 3253
  - enzymes, peroxidases, amino acids, chemical composition, cell walls 8100
  - forest fires, forest ecology, South America 2916
  - seeds, chemistry, alpha-amylase 2989
  - synecology, Argentina 1552
- ***Araucaria bidwillii,*** seed germination, anatomy 2935
- ***Araucaria cunninghamii***
  - erosion, measurement, Australia 7553
  - forest management
    - gully erosion, Australia, classification 7551
    - hydrology, Australia 7547
- ***Araucaria hunsteinii,*** seed germination, embryonic development, seed longevity, storage 9431
- ***Araucaria klinkii*** (*see Araucaria hunsteinii*)
- **Araucariaceae,** wood anatomy, identification 8066
- **Arboreta**
  - conifers, nature conservation, UK 6758
  - Czech Republic 2439
  - Denmark, guide books 4988
- **Arboreta** *cont.*
  - forest trees
    - nature conservation
      - Irish Republic 5003
      - UK 5003
    - species trials, exotics, New Zealand 2545
  - forests, Arid Regions, Sri Lanka, monographs 7611
- **Arboricides** (*see also* Herbicides; Weed control, woody weeds)
  - *Betula pendula,* laboratory tests 783
  - *Populus tremula*
    - natural regeneration, control, Russia 8635
    - Russia 2643
- **Arboriculture**
  - amenity trees, bacterial diseases, control 10016
  - pest management, USA, standards, public opinion 4136
  - ropes, safety 10151
  - spades, UK, surveys 9552
  - *Tilia,* ornamental woody plants 9309
- ***Arbutus menziesii***
  - roots
    - morphology, adaptation, USA 9794
    - soil physical properties, soil parent materials, USA 4486
- ***Arbutus unedo***
  - biomass production, plant water relations, gas exchange, plant nutrition, Spain 3793
  - coppice, plant competition, biomass, Spain 3865
  - reproductive behaviour, climate, Italy 3838
  - shoots
    - fire ecology, plant physiology, Spain 9775
    - light, plant physiology, plant competition, Spain 8753
  - stand development, Greece 4803
  - stomata, photosynthesis, transpiration, diurnal variation 456
  - water stress, Spain, growth 1937
- ***Arceuthobium americanum***
  - mistletoes
    - *Pinus contorta*
      - oleoresins, increment 7206
      - resistance, *Dendroctonus ponderosae* 7205
- ***Arceuthobium pusillum,*** mistletoes, *Picea rubens,* USA, distribution 616
- ***Archaeopteris,*** palaeobotany, plant development 3889
- ***Archaeopteris notosaria,*** palaeobotany, palaeoclimatology, South Africa 8148
- **Arctic Regions,** conifers, boreal forests, dendroclimatology 4140
- ***Arctostaphylos viscida***
  - roots
    - morphology, adaptation, USA 9794
    - soil physical properties, soil parent materials, USA 4486
- **Arecaceae**
  - Amazonia
    - books 7620
    - geographical distribution 5048
  - books 744
  - foliage, development 3730
  - forest resources, resource utilization, forest ownership, forest management, Nigeria 7700
  - fruits, oxalates 2971
  - fungal diseases, *Guignardia candeloflamma,* Indonesia 8307
  - insect pests, *Brassolis sophorae,* Venezuela 5732
  - synecology, fruiting, Brazil 3060
- ***Arenga pinnata,*** wood chemistry, Indonesia 2058
- ***Argania spinosa***
  - micropropagation
    - mycorrhizas
      - *Glomus intraradices*
        - biomass production 3146
        - growth 3146
        - plant nutrition 3147
  - multipurpose trees, Morocco 3702

- ***Argania spinosa*** *cont.*
  - mycorrhizas, *Glomus intraradices,* micropropagation, biomass production 3146
- ***Argemone fruticosa***
  - bark, anatomy 2023
  - wood anatomy 2023
- **Argentina**
  - afforestation, grants 5042
  - *Aspidosperma quebracho-blanco*
    - old-growth forests, forest borders, stand structure 7271
    - silviculture, forest management, grazing 1504
    - vegetation types, precipitation 3914
  - bamboos, *Chusquea culeou,* biology 1201
  - conifers, forest plantations, site class assessment, statistical analysis 225
  - deciduous forests 3929
  - *Eucalyptus,* provenance trials, species trials 835
  - forest nurseries 909
  - forest trees
    - phenology, climate 1210
    - pollination
      - Apidae, landscape ecology 1470
      - forest ecology, fragmentation 4954
  - forestry, women 814
  - fungal diseases
    - *Nectria rigidiuscula, Toona ciliata* 8305
    - *Nothofagus pumilio,* damage 8288
  - insect pests
    - *Pyrrhalta luteola, Ulmus,* biology, damage 2338
    - *Sirex noctilio, Pinus,* control 1494
    - surveys 2301
  - *Libocedrus chilensis*
    - forest decline, stand characteristics, mortality, analysis 3019
    - plant succession 9015
    - pollen, viability, age of trees 6510
    - reproductive behaviour, plant morphology 2104
  - mixed forests, forest fires, forest ecology 2916
  - mountain forests, synecology 2148
  - mycoplasmal diseases, *Melia azedarach,* control 1466
  - mycorrhizas, *Pinus ponderosa,* forest nurseries, seedling growth 4009
  - *Nothofagus pumilio*
    - natural regeneration
      - group fellings 1742
      - measurement, data analysis 5943
    - plant morphology, equations 6170
    - volume determination, merchantable volume, estimation 5171
  - *Phyllocladopitys petriellae,* palaeobotany 8142
  - *Pinus,* foliage, air pollution, heavy metals 4555
  - *Populus*
    - agroforestry 1567
    - increment, height, diameter, equations 790
  - *Populus* 'Conti 12', forest nurseries, weed control, herbicides 943
  - *Populus deltoides,* agroforestry 6735, 10108
  - *Prosopis*
    - afforestation, techniques 4951
    - exudates, yeasts 9065
    - silvicultural systems, wood properties 7119
  - *Prosopis alba,* seeds, microbial flora, seed germination 860
  - *Prosopis caldenia,* phenology, climate 1210
  - *Prosopis flexuosa,* scrub, research, ecology, management 1383
  - protection of forests 1552
  - rain forests, deforestation, remote sensing 5861
  - riparian forests, stand structure, forest litter 3081
  - *Salix,* agroforestry 6735
  - savannas, deforestation 5000
- **Argentina** *cont.*
  - *Schinopsis quebracho-colorado,* old-growth forests, forest borders, stand structure 7271
  - sclerophyllous scrub 3929
  - soil, maps, site class assessment 1087
  - thinning, soil 177
  - vegetation, ecology, management, conferences 776
  - vegetation types 1552
  - *Ziziphus mistol,* genetic variation, flavonoids 420
- ***Argyresthia goedartella,*** insect pests, *Alnus,* Germany 10042
- ***Argyresthia illuminatella,*** insect pests, *Abies alba,* Italy, life cycle 9156
- ***Argyrodendron actinophyllum,*** insect pests, Australia, damage 624
- **Arid Regions**
  - *Acacia,* synecology, site factors, variation, Kenya 8153
  - *Acacia senegal,* agroforestry, nitrogen cycle, simulation 4118
  - afforestation
    - desertification, Turkmenistan 2405
    - water management, Iran 1116
  - agroforestry, books 7
  - arboreta, forests, Sri Lanka, monographs 7611
  - broadleaves, genetic resources, species trials, conservation 1436
  - Fabaceae, seed dormancy 7323
  - forest trees, air pollution, reviews 1968
  - forestry
    - books 7
    - planning, management, sustainability, books 4149
    - research, Kenya, reviews 6000
    - sustainability, reviews 7689
  - forestry development, vegetation types, forest management, Africa 1011
  - mist, traps, design, Chile 940
  - protection forests, silviculture, Russia 9234
- **Armenia,** vegetation types, forest resources 9394
- ***Armillaria***
  - fungal diseases
    - conferences 3311
    - Netherlands, distribution 5627
    - *Picea abies*
      - Switzerland 6628
      - thinning, Sweden 5625
    - *Pinus contorta,* oleoresins, increment 7206
- ***Armillaria cepistipes,*** fungal diseases, *Quercus petraea,* Hungary 2267
- ***Armillaria gallica,*** fungal diseases, *Picea abies,* Germany 1451
- ***Armillaria limonea,*** fungal diseases, *Pinus radiata,* New Zealand 4017
- ***Armillaria mellea,*** fungal diseases, *Pinus contorta,* resistance, *Dendroctonus ponderosae* 7205
- ***Armillaria novae-zelandiae,*** fungal diseases, *Pinus radiata,* New Zealand 4017, 4860
- ***Armillaria ostoyae***
  - fungal diseases
    - Canada, control, machinery 5160
    - conifers, thinning, USA 10008
    - *Picea abies,* Germany 1451
    - *Pinus,* USA, population structure 9094
    - *Pinus pinaster,* biological control, France 9127
    - *Pinus resinosa,* USA, population genetics 2261
- ***Armillariella mellea*** (*see Armillaria mellea*)
- ***Artemisia frigida,*** rangelands, weed control, Canada 5145
- ***Artemisia ordosica,*** site class assessment, China 9600
- ***Artemisia sphaerocephala,*** site class assessment, China 9600
- ***Artemisia tridentata,*** rangelands, weed control, physical control, USA 5147
- **Arthropods**
  - ecology
    - *Pinus,* dead wood, Australia 2297
    - *Quercus,* forest fires, USA 2004
- **Arthropods** *cont.*
  - *Pinus rigida,* forest ecology, USA 7420
  - rain forests, New Caledonia 7419
  - tropical forests, epiphytes, Mexico, interactions 6561
- ***Artibeus jamaicensis,*** Chiroptera, Puerto Rico, feeding behaviour, foliage 6695
- **Artificial regeneration**
  - *Abies pindrow,* site preparation, weed control, Pakistan 5132
  - *Betula,* farm forestry, natural regeneration, Sweden 6921
  - forest trees, protection forests, Germany 7552
  - mountain forests
    - air pollution, damage, Germany 9500
    - mixtures, Germany 948
  - *Picea,* site preparation, planting, Canada 9508
  - *Picea abies*
    - clear felling, site preparation, Sweden 9541
    - direct sowing, tree guards, Italy 6114
    - shelterwood system, natural regeneration, Sweden 9541
  - *Picea glauca,* boreal forests, seedlings, Canada 9503
  - *Pinus contorta,* controlled burning, site preparation, Canada 8880
  - *Pinus echinata,* USA 2464
  - *Pinus radiata*
    - planting stock
      - grading, morphology, South Africa 182
      - mortality, South Africa 183
    - site preparation
      - soil chemistry, plant nutrition, South Africa 180
      - soil organic matter, South Africa 181
  - *Pinus sylvestris,* natural regeneration, wood properties, increment, Sweden 7120
  - *Pterocarpus angolensis,* seedling growth, forest nurseries, Tanzania 9479
  - *Quercus,* USA, conferences 2474
  - *Quercus robur,* Russia, sowing, stumps 934
  - *Quercus rubra,* tree guards, USA 8625
  - *Quercus suber,* natural regeneration, Spain, reviews 7775
  - seedbeds, site factors, predators, *Eucalyptus marginata,* Australia 3441
  - trials, *Pinus radiata,* site preparation, soil physics, South Africa 179
  - woody plants, natural regeneration, farm forestry, Australia 7687
- ***Artocarpus,*** rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
- ***Artocarpus chaplasha,*** forest nurseries, containers, seedling growth, survival, Bangladesh 6076
- ***Artocarpus heterophyllus***
  - fungal diseases
    - *Nigrospora sphaerica,* Bangladesh, foliage 6636
    - *Pestalotiopsis versicolor,* Bangladesh, foliage 6636
- ***Artocarpus lakoocha***
  - forest nurseries, Nepal, planting stock, production costs 9480
  - multipurpose trees, fibre plants, India 2678
- ***Arundinaria,*** vegetative propagation, indigenous knowledge, Nepal 6883
- ***Arundinaria falcata,*** secondary forests, biomass production, cycling, India 3254
- ***Ascocoryne cylichnium,*** fungal diseases, *Picea abies,* fatty acids, sterols 2259
- ***Ascotis imparata,*** insect pests, *Pongamia pinnata,* India 10041
- **Asia**
  - agroforestry 5881
    - history, socioeconomics 5886
    - research, conferences 2477
  - canes and rattans
    - choice of species
      - conferences 7714
      - handbooks 7714

- **Asia** *cont.*
  - community forestry
    - development projects, non-governmental organizations, conferences 774
    - forest management, resource management, bibliographies 6795
  - degraded forests, tropical forests, reclamation, conferences 2479, 3232, 3245
  - environmental management, sustainability, mountain areas, books 2453
  - farm forestry, surveys, trees, products, utilization 1548
  - forest plantations, tissue culture, mycorrhizas, conferences 8483
  - forestry 9388
    - research, management, conferences 2481
  - fruit trees, wild relatives, genetic resources 7366
  - insect pests, ecology, control, books 5
  - *Kopsia,* chemotaxonomy 3846
  - multipurpose trees, choice of species, reviews 1656
  - social forestry, deforestation, theory 10120
  - tropical forests, deforestation, forest management, sustainability, conferences 6801
  - woody plants, geographical distribution 7262
- **Aspect**
  - broadleaves, forest litter, soil chemistry, Australia 2817
  - *Fagus,* natural regeneration, stand structure, Japan 9001
  - forests, soil water, China 8770
  - mixed forests, botanical composition, topography, Japan 6274
  - *Picea rubens,* frost injury, solar radiation, USA 8763
  - *Pinus contorta,* injuries, oleoresins, USA 7206
  - *Pinus radiata,* plant physiology, New Zealand, measurement, carbon isotopes 4694
  - *Pinus sylvestris,* soil chemistry, nitrogen, Spain 7889
- ***Aspidiotus cryptomeriae,*** insect pests, Gymnosperms, Japan 9144
- ***Aspidiotus nerii,*** insect pests, *Acacia saligna,* simulation, Israel, parasites 7443
- ***Aspidosperma cruentum,*** seedlings, light, Panama, predation, growth 3100
- ***Aspidosperma polyneuron,*** endangered species, Paraguay 1577
- ***Aspidosperma pruinosum,*** wood anatomy 6430
- ***Aspidosperma quebracho-blanco***
  - mountain forests, synecology, Argentina 2148
  - old-growth forests, forest borders, Argentina, stand structure 7271
  - silviculture, forest management, grazing, Argentina 1504
  - vegetation types, precipitation, Argentina 3914
- ***Aspidosperma tomentosum,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- **Assimilation**
  - broadleaves
    - coppice, silvicultural conversion, Italy 8935
    - gas exchange 4690
  - *Eucalyptus globulus,* genetic variation, water stress, Portugal 1930
  - forest trees, measurement, France, equipment 2487
  - *Pinus pinea,* roots, development, plant nutrition 2965
  - *Populus eugenei,* biomass, nutrient allocation, carbon 3641
  - *Quercus cerris,* coppice, silvicultural conversion, Italy 8935
  - seasonal variation, *Pinus sylvestris,* Germany 3006
- **Assortments**
  - *Laurelia philippiana,* Chile, secondary forests 992
  - *Nothofagus,* Chile, secondary forests 992
  - *Pinus radiata,* volume, yield forecasting, South Africa, equations 216
- ***Astartea fascicularis,*** seed germination, temperature 76
- **Asteraceae,** flora, Peru 7247
- ***Asteromyrtus,*** essential oils, chemotaxonomy 2118
- ***Astrocaryum jauari,*** flooding tolerance, plant physiology, Brazil 1113
- ***Astronium graveolens,*** rain forests, Mexico, wood anatomy 1211
- ***Atamisquea emarginata,*** pollination, Argentina, forest ecology, fragmentation 4954
- ***Ateleia herbert-smithii,*** species trials, India 1673
- ***Atherosperma,*** forest fires, forest ecology, simulation 2920
- ***Atherosperma moschatum***
  - forest litter, streams, rain forests, Australia 7896
  - genetic variation
    - isoenzymes 8242
      - population genetics, Australia 7380
  - seedling growth, rain forests, canopy, light, Australia 3536
- **Atmosphere**
  - afforestation, projects, carbon cycle, forest influences, World 8013
  - air flow, *Picea sitchensis,* spacing, canopy, UK 8014
  - broadleaves, forest influences, Austria, volatile compounds 8015
  - forest fires 366
  - forest influences
    - precipitation
      - India, simulation 9759
      - Tropics, simulation 9759
    - silviculture, carbon cycle, Norway, simulation 2901
  - *Fraxinus pennsylvanica,* remote sensing, canopy, energy relations, USA 1028
  - pollen, Spain, urban areas, botanical composition, variation 3069
  - vegetation
    - precipitation
      - India, simulation 9759
      - Tropics, simulation 9759
- ***Atriplex,*** choice of species, fodder, genetic resources, India 2556
- ***Atriplex canescens,*** water management, saline water, agricultural land, USA 5866
- ***Atriplex halimus,*** provenance, fodder, biomass production, Mediterranean Region 1676
- ***Atriplex semibaccata,*** reclamation, saline soils, mined land, South Africa 8391
- ***Atropellis piniphila,*** fungal diseases, *Pinus contorta,* stand density, Canada 6631
- ***Atta,*** insect pests, *Pinus,* forest plantations, Venezuela 6645
- ***Atta cephalotes,*** insect pests, *Rinorea deflexiflora,* Costa Rica, predators, *Paraponera clavata* 6661
- ***Atta laevigata,*** insect pests, *Pinus caribaea,* Venezuela, host parasite relationships 4044
- ***Atta sexdens,*** insect pests, Argentina 2301
- ***Atta sexdens rubropilosa,*** insect pests, broadleaves, Brazil 7489
- ***Atteva fabriciella,*** insect pests, *Ailanthus,* India, natural enemies 1485
- ***Aubrevillea kerstingii,*** rain forests, soil properties, Nigeria 7878
- ***Aucuba japonica,*** roadside plantations, forest influences, air pollution, Japan 7126
- ***Aulographina eucalypti,*** fungal diseases, *Eucalyptus,* Madagascar, foliage 7403
- **Australia**
  - *Acacia*
    - agroforestry, choice of species, arid zones, subtropics 3369
    - taxonomy 5431
      - new taxa 3858
  - *Acacia aneura,* woodlands, landscape, soil chemistry 9002
- **Australia** *cont.*
  - *Atherosperma moschatum,* genetic variation, isoenzymes, population genetics 7380
  - *Banksia integrifolia,* taxonomy 2117
  - biofertilizers, microorganisms 5591
  - broadleaves
    - forest plantations, research 3353
    - sap flow, measurement 6300
    - tree breeding, clones, salt tolerance, waterlogging 3138
  - chainsaws 1794
  - controlled burning, fire ecology, forest management, reviews 3697
  - cycads, flowers, insects 3038
  - *Duranta,* taxonomy 8129
  - *Eremophila*
    - medicinal plants 3472
    - seed germination, reclamation 4264
    - uses, ethnobotany 192
  - *Eucalyptus*
    - direct sowing
      - establishment
        - forest ecology, reviews 2636
        - plant physiology, reviews 2636
    - essential oils 3747
    - foliage
      - chemistry, provenance, chemotaxonomy 2986
      - essential oils 2973
    - forest plantations, forest influences, soil properties 1185
    - injuries, wood defects 5344
    - phosphorus fertilizers, mineralization 5110
    - plant morphology, taxonomy 496
    - soil amendments, wood ash, soil chemistry 1096
    - stems, mechanics, breakage, cavities in trees 5372
    - yield forecasting, growth models 6193
  - *Eucalyptus albens,* population genetics, woodlands, fragmentation 5559
  - *Eucalyptus globulus,* provenance, identification, increment, traits 7724
  - *Eucalyptus marginata,* photosynthesis, water stress, drought resistance 1123
  - *Eucalyptus nitens,* chloroplast genetics, population genetics 2213
  - farm forestry, books 4158
  - forest management
    - multiple use, sustainability 6209
    - plant nutrition, plant water relations 7826
    - terminology 6796
  - forest policy
    - forest administration 4242
    - nature conservation 2526, 7595
  - forest resources, reports 2527
  - forest trees
    - seeds, biodiversity, conservation, research institutes 8549
    - soil chemistry, aluminium, growth 3573
  - forestry, reports 2527
  - insect pests
    - *Eucalyptus,* host parasite relationships, theory 4029
    - *Ips grandicollis, Pinus,* ecology 2297
  - mensuration, terminology 6796
  - mycorrhizas
    - *Pisolithus* 8275
    - *Rozites*
      - Myrtaceae, forests 5592
      - *Nothofagus,* forests 5592
  - Myrtaceae, seeds, forest fires, insulation 2100
  - *Pinus*
    - dead wood, arthropods, ecology 2297
    - wood properties
      - genetic variation 7113
      - site factors 7113
  - *Pinus radiata*
    - forest plantations, forest influences, soil properties 1185
    - nitrogen fertilizers, genetic variation, plant physiology 7752

Australia *cont.*
- *Pinus radiata cont.*
  - soil organic matter, podzolic soils, carbon cycle, silviculture 4489
- Podocarpaceae, foliage, morphology, palaeobotany, taxonomy 497
- rabbits, *Oryctolagus cuniculus*, forest plantations, control, books 6787
- rain forests, forest trees, keys, computer techniques 6769
- remote sensing
  - satellites, radiometry, forest fires 7848
  - vegetation, change, rangelands 7853
- research, forestry 3355
- root nodules
  - *Bradyrhizobium, Chamaecytisus palmensis* 2241
  - *Rhizobium, Chamaecytisus palmensis* 2241
- *Santalum* 4168
- training, forestry workers, professional competence 6004
- tropical forests, deforestation, forest management, sustainability, conferences 6801
- vegetation, history, palaeobotany, books 6770
- vegetation types 2451
  - classification 3924
- weed control, *Mimosa pigra*, biological control, beneficial insects, *Mictis profana* 7797
- wildlife, forest ecology, logging effects, nature conservation, reviews 4129
- Australian Capital Territory
  - *Eucalyptus*
    - forest fires, simulation 4608
    - roots, mechanics, heartwood 6405
    - sclerophyllous forests, *Pinus radiata*, invasion 1414
  - *Eucalyptus nitens*, flowering, induction, plant growth regulators 4734
  - *Eucalyptus pauciflora*, forestry practices, soil biology, microorganisms 7927
  - *Eucalyptus polyanthemos*, establishment, shelter, microclimate 3442
  - forest litter, fire danger, fuels, moisture 372
  - *Pinus radiata*, forest fires, simulation 4608
- New South Wales
  - *Acacia terminalis*, seed dispersal, Formicidae 484
  - *Acacia victoriae*, stand development, population dynamics, simulation 3955
  - *Avicennia marina*, natural regeneration, soil salinity, soil chemistry, light 3883
  - birds, forest ecology, logging 4062
  - broadleaves
    - forest litter, aspect, soil chemistry 2817
    - roots, soil physics, plant competition 3059
    - seed banks 7324
  - *Casuarina*
    - vegetation
      - history
        - groundwater 2126
        - soil salinity 2126
  - controlled burning, fire prevention, decision making, nature reserves 7134
  - *Eucalyptus*
    - biomass, site factors, theory 3332
    - fertilizers, increment, insect pests 9138
    - foliage, lenticels, plant anatomy 8055
    - insect pests, defoliation, soil properties 7286
    - silviculture, forest plantations, research 4364
    - synecology, site factors, simulation 3329
    - vegetation types, soil chemistry, soil fertility 7272

Australia *cont.*
- New South Wales *cont.*
  - *Eucalyptus cont.*
    - volume determination, equations 4389
    - water use, leaf area, equations 7667
  - *Eucalyptus camaldulensis*, plant water relations, plant composition, insect pests 3603
  - *Eucalyptus microcorys*, forest management, nature conservation 1580
  - *Eucalyptus pauciflora*, biomass distribution, altitude 4484
  - *Eucalyptus pilularis*, thinning, planning 4351
  - *Eucalyptus polybractea*, irrigation, essential oils 4376
  - *Eucalyptus sieberi*, secondary forests, controlled burning, simulation 2497
  - flora 12
  - forest economics, nature conservation, cost benefit analysis, methodology 1052
  - forest trees, rain forests, flora, books 4996
  - *Gleditsia triacanthos*, woody weeds, spread, control 168
  - habit, seed size 2938
  - *Hakea*, seeds, mortality, fire effects 2917
  - heathlands, plant competition, forest fires, simulation 3698
  - insect pests
    - *Cardiaspina, Eucalyptus*, control 9138
    - *Eucalyptus* 7422
      - provenance, resistance 4031
    - *Eucalyptus camaldulensis*, damage 5681
  - land use, forest ownership, nature conservation 6713
  - mammals
    - forest ecology, logging 4062
    - *Vombatus ursinus*, forest trees 10063
  - mangroves
    - *Aegiceras corniculatum*, phenology, forest litter 3704
    - *Avicennia marina*
      - phenology, forest litter 3704
      - reproductive behaviour, seed dispersal 3041
  - *Melaleuca alternifolia*, genetic variation, essential oils 2220
  - mistletoes, *Amyema miquelii, Eucalyptus*, control 4879
  - *Pinus radiata*
    - biomass, cycling 6183
    - stem form, volume, phosphorus fertilizers 5105
    - thinning, fertilizers 1708
  - rabbits, *Oryctolagus cuniculus, Acacia oswaldii*, natural regeneration 4928
  - rain forests, history 4762
  - remote sensing, statistical analysis, vegetation types 1856
  - sclerophyllous forests, forest litter, decomposition 7051
  - sclerophyllous scrub
    - botanical composition, forest fires 7138
    - forest fires, soil temperature, seed germination 8036
  - secondary forests, forest management, growth models, research 6833
  - *Streblus brunonianus*, pollen, release 1312
  - vegetation types, botanical composition, soil properties, soil parent materials 7043
  - weeds, *Pteridium aquilinum, Eucalyptus*, simulation 2508
  - wildlife
    - forest management 10064
    - mammals, *Eucalyptus* 10062
  - woodlands, remote sensing 3526

Australia *cont.*
- New South Wales *cont.*
  - woody plants, natural regeneration, artificial regeneration, farm forestry 7687
  - *Xanthorrhoea resinifera*, nomenclature 3853
- Northern Territory
  - *Acacia*, phenology, climate, site factors, soil water 3707
  - *Allosyncarpia ternata*, mortality, rain forests, forest fires 3113
  - *Bombax malabaricum*, natural regeneration, rain forests, ecotones 3935
  - broadleaves
    - savannas, ecotones, soil chemistry 3087
    - vegetation types, remote sensing, image processing 2763
  - *Callitris intratropica*, fire ecology, natural regeneration 2005
  - controlled burning, weed control, woody weeds, *Mimosa pigra* 1761
  - *Eucalyptus camaldulensis*, shoots, growth, plant physiology, climate 3765
  - forest fires, fire danger, fire weather 1999
  - forest trees
    - foliage, chemistry 7081
    - mycorrhizas, reclamation, mined land 5590
  - insect pests
    - *Eucalyptus*
      - tropical forests 3175
        - damage 3174
  - insects, Formicidae, *Eucalyptus*, controlled burning 378
  - mangroves, *Sonneratia*, salt tolerance 6553
  - rain forests
    - forest fires, climate, storms 7256
    - forest fragmentation, synecology, nature conservation 10129
    - Formicidae, forest ecology 623
    - seed banks 3824
  - *Ravenala madagascariensis*, exotics, reproductive behaviour, plant colonization 1306
  - remote sensing, multispectral imagery, vegetation, reflectance, climate 1867
  - savannas
    - forest fires
      - climate, storms 7256
      - cycling 2003
  - *Sterculia quadrifida*, natural regeneration, rain forests, ecotones 3935
  - vegetation types, sclerophyllous scrub, nature conservation 7283
  - woody weeds, *Mimosa pigra*, seed banks 8641
- Queensland
  - afforestation, mixtures, degraded land, reclamation 3233
  - *Albizia lebbeck*
    - agroforestry 6729
    - canopy, increment, diameter 1821
  - *Alphitonia petriei*, reclamation, direct sowing 8395
  - *Araucaria cunninghamii*
    - erosion, measurement 7553
    - forest management
      - gully erosion, classification 7551
      - hydrology 7547
  - broadleaves
    - species trials
      - salt tolerance
        - growth 5052
        - survival 5052
    - tree guards, seedling growth 5129
  - *Casuarina cunninghamiana*, agroforestry 6729
  - *Celtis paniculata*, veteran or remarkable trees 6857
  - *Ceratopetalum virchowii*, adventitious roots, stemflow, nutrients 391

- **Australia** *cont.*
  - Queensland *cont.*
    - *Eucalyptus*
      - rain forests, palaeoecology 2132
      - taxonomy, new species 3859
      - water use, leaf area, equations 7667
    - *Eucalyptus ammophila,* taxonomy, new species 3861
    - *Eucalyptus camaldulensis*
      - essential oils, monoterpenes, yields 3748
      - planting, tree guards, mulching 2637
      - tree breeding, progeny testing, essential oils 6018
    - *Eucalyptus clandestina,* taxonomy, new species 3860
    - *Eucalyptus maculata,* agroforestry 6729
    - *Eucalyptus populnea,* transpiration, sap flow, measurement 6813
    - flora 7242
    - forest trees
      - rain forests, flora, books 4996
      - reclamation, species trials, saline soils 7715
    - fungal diseases, *Guignardia candeloflamma, Pinanga* 8307
    - *Gleditsia triacanthos,* woody weeds, spread, control 168
    - insect pests
      - *Amblypelta lutescens, Murraya paniculata,* parasitoids 2311
      - *Argyrodendron actinophyllum,* damage 624
      - *Eucalyptus* 7421
      - *Lygropia clytusalis, Brachychiton* 2327
      - *Rhyparida limbatipennis,* broadleaves, forest decline 7204
    - *Lantana camara*
      - woody weeds
        - rain forests 2647
        - savanna woodlands 2647
    - mangrove forests
      - soil biology, crabs 7058
      - soil pollution, sediment, heavy metals 8828
    - mangroves, foliage, light, phenolic compounds 434
    - *Melaleuca alternifolia,* genetic variation, essential oils 2220
    - *Melaleuca viridiflora,* controlled burning, stand structure, epiphytes 3089
    - *Normanbya normanbyi,* seed predation 6513
    - *Persoonia,* taxonomy 7224
    - *Pinus,* stem form 6166
    - *Pinus caribaea*
      - provenance trials, wood properties 6866
      - thinning, growth models, economic evaluation 8648
    - Proteaceae, rain forests, foliage, morphology 4651
    - rain forests
      - deforestation, remote sensing 9261
      - forest influences, soil chemistry 5248
      - light penetration, canopy gaps 3554
      - mountains, stand development 5470
      - precipitation, canopy, wind, simulation 7123
      - seedlings, light, canopy 2798
      - seeds, survival, predation 4050
      - selection system, simulation, sustainability 4428
      - stand structure
        - biodiversity 2155
        - simulation, site factors 3896
      - synecology, species diversity 7294
    - *Sloanea woollsii,* plant water relations, water uptake 7944

- **Australia** *cont.*
  - Queensland *cont.*
    - vegetation types
      - plant water relations, water availability 8807
      - surveys, geographical information systems, sampling 7014
    - weeds, *Pteridium aquilinum, Eucalyptus,* simulation 2508
    - wildlife, birds, *Melaleuca quinquenervia,* urban areas 4052
    - woodlands, *Eucalyptus,* erosion 9241
  - South Australia
    - broadleaves, plant water relations 9717
    - *Casuarina*
      - vegetation
        - history
          - groundwater 2126
          - soil salinity 2126
    - *Eucalyptus,* taxonomy 8130
    - *Eucalyptus camaldulensis*
      - water uptake
        - flooding 2837
        - hydrology 8809
        - saline water 3616
    - insect pests
      - *Eucalyptus* 7425
      - *Sirex noctilio, Pinus radiata,* biological control 6660
    - *Pinus radiata*
      - agroforestry, economics, simulation 7578
      - forest plantations, rotations, economics 6247
      - soil chemistry, carbon, nitrogen 7884
  - Tasmania
    - *Anodopetalum biglandulosum,* habit, synecology, canopy gaps 2012
    - *Atherosperma moschatum,* rain forests, canopy, light 3536
    - birds
      - sclerophyllous forests, cavities in trees 6692
      - silvicultural systems, *Eucalyptus,* logging effects 7532
    - *Eucalyptus*
      - browsing damage, productivity 8711
      - essential oils, chemistry, chemotaxonomy 8094
      - genetic variation, insect pests, defoliation 7461
      - progeny testing, genetic variation, frost resistance 8241
      - silvicultural systems 2628
      - species trials
        - chemotaxonomy, essential oils 5399
        - increment 3477, 6190
    - *Eucalyptus globulus,* genetic variation, foliage, morphology 5556
    - *Eucalyptus nitens*
      - fertilizers, nutrient deficiencies, copper 1717
      - site preparation, weed control, nitrogen-phosphorus fertilizers 3463
    - *Eucalyptus obliqua,* silviculture, forest ecology, Carabidae 7417
    - *Eucalyptus regnans*
      - soil pH, seed germination, controlled burning 5365
      - thinning, biomass production, light 8650
    - forest fragmentation, synecology, endangered species 10128
    - forest management
      - standards, environmental impact 6791
      - sustainability 8716
    - forest plantations, pesticides, water pollution, buffer zones 6358
    - fungal diseases, *Phytophthora cinnamomi,* endangered species, forest management 7395
    - insect pests
      - *Chrysophtharta bimaculata*
        - *Eucalyptus,* defoliation 7461
        - *Eucalyptus regnans* 6656

- **Australia** *cont.*
  - Tasmania *cont.*
    - insect pests *cont.*
      - *Chrysophtharta bimaculata cont.*
        - *Eucalyptus regnans cont.*
          - predators 5738
      - *Eucalyptus* 7424
    - land use, multiple use 8408
    - mycorrhizas, *Eucalyptus tenuiramis* 2244
    - *Nothofagus,* foliage, length, palaeoecology 3065
    - *Nothofagus cunninghamii,* rain forests, Bryophyta, lichens 9945
    - *Phyllocladus aspleniifolius,* natural regeneration, stand structure, population ecology 3953
    - *Pinus sylvestris,* increment, composts, wood residues 7763
    - rain forests, synecology, botanical composition, stand structure 3055
    - sclerophyllous forests, *Eucalyptus,* fauna, Formicidae 10028
    - soil types, mapping 8743
  - Victoria
    - *Acacia,* gums, chemistry, marsupials 2978
    - Acari, woody plants, foliage, morphology 621
    - *Atherosperma moschatum,* forest litter, streams, rain forests 7896
    - birds, *Calyptorhynchus funereus, Eucalyptus regnans,* forest management 4066
    - *Casuarina*
      - vegetation
        - history
          - groundwater 2126
          - soil salinity 2126
    - *Cupressus macrocarpa,* forest litter, water pollution, reservoirs 5352
    - *Eucalyptus*
      - agroforestry, browsing damage, sheep 9270
      - foliage, lenticels, plant anatomy 8055
      - forest decline, plant nutrition, nitrogen, enzymes 3635
      - forest influences, soil toxicity 5354
      - insect pests, defoliation, soil properties 7286
      - logging
        - buffer zones, planning 10086
        - hydrology, simulation 3336
      - nomenclature, taxonomy 5434
      - stand characteristics, mortality, simulation 2504
      - woodlands, honey bees, birds 8356
    - *Eucalyptus globulus*
      - agroforestry, groundwater 7579
      - genetic variation, foliage, morphology 5556
      - provenance trials, fungal diseases 4869
    - *Eucalyptus regnans*
      - clear felling, soil physical properties, logging effects 5237
      - forest fires, soil properties 7137
      - forest fragmentation
        - *Trichosurus caninus*
          - population dynamics 8363
          - population genetics 8364
          - simulation 8363-8364
      - thinning, biomass production, light 8650
    - fire danger, mallee 373
    - flora 3296
    - forest economics
      - nature conservation
        - cost benefit analysis, methodology 1052
        - valuation 3533
    - forest fires, fire danger, estimation, simulation 4607
    - forest inventories, remote sensing, economic evaluation 6999
    - forest management, decision making, valuation 7017

Australia *cont.*
  Victoria *cont.*
    forest trees
      foliage, optical properties 6222
      hydrology 6370
      rain forests, flora, books 4996
    fungal diseases
      Mycosphaerella, Eucalyptus globulus, resistance 4869
      Mycosphaerella pini, Pinus radiata, disease vectors 6664
      Ophiostoma ulmi, Ulmus 4980
    insect pests
      Eucalyptus 7423
        provenance, resistance 4031
      Mnesampela privata, Eucalyptus globulus, provenance trials 2554
      Phylacteophaga froggatti, Eucalyptus globulus, provenance trials 2554
      Pyrrhalta luteola
        Ulmus 4980, 5787
          bacterial insecticides 5790
          biological control 5788
          insecticides 5789
      Sirex noctilio, Pinus radiata, biological control 6664
    mammals, *Eucalyptus,* logging effects, forest ecology 3194
    marsupials
      Eucalyptus, simulation 2388
      Gymnobelideus leadbeateri
        Eucalyptus
          population dynamics 5818
          wildlife conservation 9216
        forest fires, simulation models 9225
        forest management, nature conservation 4967
      Petauroides volans, Eucalyptus regnans, forest management 1525
      Trichosurus caninus
        simulation
          forest fragmentation 8363-8364
          population dynamics 8363
          population genetics 8364
    Melaleuca, agroforestry, groundwater 7579
    Pinus radiata
      increment, site preparation, slash 6119
      soil fertility, forest litter, plant composition 5117, 5268
    reclamation
      saline soils, farm forestry, development projects 7566
      soil types, farm forestry, agroforestry, wetlands 8410
    sclerophyllous forests
      controlled burning, soil fauna 6376
      natural regeneration, fungal diseases, *Phytophthora cinnamomi* 3954
    Tamarix aphylla, salt glands 2071
    vegetation types, remote sensing, multispectral imagery 6222
    weeds, *Pteridium aquilinum, Eucalyptus,* simulation 2508
    wildlife
      birds, *Eucalyptus,* thinning 5822
      forest management, multiple use, simulation 5020
      marsupials
        Eucalyptus
          population dynamics 5819
          thinning 5822
    wildlife conservation, forest management 9230-9231
  Western Australia
    Acacia
      palaeoecology 3885
      taxonomy, new taxa 3857
    agroforestry 9283
    Banksia, stand characteristics, forest fires, plant water relations 6577
Australia *cont.*
  Western Australia *cont.*
    Banksia brownii, reproductive behaviour, population genetics, endangered species 3825
    Banksia menziesii, habit, reproductive behaviour, plant water relations 3032
    Banksia prionotes, plant nutrition, translocation 1288
    bibliographies, research 7707
    Casuarinaceae, palaeoecology 3885
    clear felling, streams, fauna 3679
    deserts, ethnobotany, indigenous knowledge 7706
    Eucalyptus
      fertilizers, sewage 6069
      foliage, leachates, wetlands 8824
      forest fires, damage 2919
      forest management, nature conservation 5194
      palaeoecology 3885
      reclamation, saline soils 711
      taxonomy, new taxa 3856
      transpiration 3596
    Eucalyptus calophylla, seed collection, forest soils, mine spoil 6466
    Eucalyptus camaldulensis, water use, estimation 4079
    Eucalyptus globulus
      agroforestry, economics 9284
      forest plantations, saline soils, reclamation 9246
    Eucalyptus marginata
      artificial regeneration, seeds 3441
      dendrochronology, forest fires 8463
      forests, leaf area index, estimation 7661
      reclamation, mined land, understorey 1542
      seed banks, seed germination, environmental factors 6572
    Eucalyptus salmonophloia
      natural regeneration, seed banks, seed predation 8141
      woodlands, recruitment, reproductive behaviour 6573
    Eucalyptus stoataptera 3855
    Eucalyptus tetraptera × *Eucalyptus stoatei* 3855
    forest fires, equations 8028
    fungal diseases
      Phytophthora cinnamomi
        Banksia attenuata 9096
          chemical control 8320
    insect pests
      Eucalyptus globulus 7426
      Formicidae
        rain forests, ecology 662
        sclerophyllous forests, ecology 662
      Ips grandicollis, Pinus, reviews 8337
      Perthida glyphopa
        Eucalyptus marginata 5703
          biology 5731
          forest fires 6653
    mangroves, climatic change 6269
    mistletoes, *Amyema miquelii, Eucalyptus salmonophloia,* spatial distribution 7413
    multipurpose trees, farm forestry, choice of species, direct sowing 10121
    mycorrhizas, *Eucalyptus,* seasonal variation 5607
    Nothofagus plicata, palaeobotany 8144
    Persooniinae, taxonomy 7225
    Pinus pinaster
      breeding programmes 8196
      provenance trials 7717
    Populus, increment, stem form 7716
    remote sensing, satellites, image interpretation, vegetation 7844
    reptiles, *Oedura reticulata, Eucalyptus,* fragmentation 7531
    Santalum album, seedling growth, light 3535
Australia *cont.*
  Western Australia *cont.*
    sclerophyllous forests
      Eucalyptus marginata, seed germination, light 8180
      forest fires, weeds, invasion 8886
    sclerophyllous scrub
      botanical composition, site factors 3077
      forest fires, forest ecology, invertebrates 8324
    species trials, bauxite residues, reclamation 67
    vegetation types, synecology 3074
    wildlife, forest ecology, landscape, fragmentation, conferences 766
Australian Oceania, Myrtaceae, foliage, chemotaxonomy, essential oils, chemistry 415
Austria
  acid deposition, soil chemistry 335
  air pollution
    altitude 7097
    monitoring 2884
  bottomland forests, forest management 9936
  broadleaves, forest influences, atmosphere, volatile compounds 8015
  climatic change, genetics, conferences 9328
  conifers
    forest decline
      increment, simulation 7202
      population dynamics, simulation 6825
  Fagus sylvatica
    biomass, distribution 227
    forest inventories, remote sensing, volume determination 6216
    forest litter
      biomass 227
      soil chemistry, Collembola 4504
    plant composition, major elements 227
    thinning, logging effects, simulation 227
  fertilizers, soil chemistry, nitrogen leaching 7759
  forest economics
    mountain forests 7856
    private forestry 263
  forest inventories, forest health 4434
  forest recreation 2430
  forest trees
    geographical distribution, maps 7001
    pollen analysis, vegetation, history 7261
    silvicultural conversion, mixtures 6940
  fungal diseases, *Guignardia aesculi, Aesculus hippocastanum* 9158
  insect pests
    Cameraria ohridella
      Acer pseudoplatanus 9158
      Aesculus hippocastanum 9158
    Cecidomyiidae, *Quercus cerris,* galls 5770
    Ips typographus
      Picea abies 7471
        pheromone traps 9196
        plant composition 2354
    Neodiprion sertifer, Pinus sylvestris, pheromone traps 5791
    Phloeosinus, conifers 9167
    Pityogenes chalcographus, Picea abies, plant composition 2354
    Pristiphora abietina
      Picea, air pollution 7487
      Picea abies
        integrated control 9176
        predators 9176
    Scolytidae, *Picea abies,* terpenoids 2357
  land classification, forest ecology 9640
  Larix decidua, altitude, stomata, ozone, uptake 7187
  mixed forests, soil chemistry, seasonal variation 7886
  Picea abies
    air pollution
      foliage 9750

Austria *cont.*
- *Picea abies cont.*
  - air pollution *cont.*
    - ozone, gas exchange 2885
    - sulfur dioxide 4565
  - crown, development 795
  - fertilizers
    - forest economics 9465
    - forest litter, ground vegetation 4304
    - soil biology 136
  - foliage
    - air pollution 4674
    - waxes, morphology, injuries 8050
  - forest decline
    - nutrient deficiencies, fungal diseases 8117
    - plant physiology, chromosome aberrations 4727
  - leaf area index, measurement, equipment 7652
  - nutrient deficiencies, magnesium, amelioration of forest sites 7754
  - ozone, plant physiology 7099
  - silvicultural systems, forest economics, simulation 6915
  - stems, monoterpenes, insect pests, attractants 2354
- *Pinus cembra*
  - carbon dioxide enrichment, dendrochronology 6764
  - increment, temperature 2799
- *Pinus nigra,* population genetics, isoenzymes 2187
- protection forests, stand development, remote sensing 245
- *Quercus*
  - forest decline
    - air pollution, soil chemistry, plant nutrition 5309
    - mycoplasmal diseases, phloem 8115

Austrocedrus (*see Libocedrus)*

Austromyrtus dulcis, foliage, essential oils, chemistry 8075

Austromyrtus tenuifolia, foliage, essential oils, chemistry 8075

Autecology
- Arecaceae, USA 6525
- *Betula*
  - Europe 386
  - UK 386
- *Betula aetnensis,* Sicily 1330
- *Fagus sylvatica,* dendrochronology, Spain 1592
- *Pinus,* dendrochronology, Spain 1592
- *Pinus resinosa,* forest fires, North America 506
- *Populus tremula,* geographical distribution, genetic variation, UK 7142
- *Quercus robur,* simulation 3326
- *Ulmus pumila,* Mongolia 8181

Auxiliary species (*see* Nurse trees)

Avalanches
- forest fires, subalpine forests, Canada 1997
- forest trees, choice of species, protection forests, Germany 6869
- protection forests, France, surveys 10089
- synecology, snow, USA 2911

Averrhoa bilimbi, pollen, anatomy, morphology 7158

Averrhoa carambola, pollen, anatomy, morphology 7158

Avicennia
- afforestation, erosion control, India 3225
- palaeobotany, America, reviews 6528

Avicennia africana
- mangrove forests, forest influences, soil properties, variation, Nigeria 8022
- mangroves, stand structure, soil properties, Nigeria 7293

Avicennia alba, mangroves, shoot cuttings, India 102

Avicennia germinans
- birds, *Haliaeetus leucocephalus,* USA, nesting 3197
- epiphytes, Cyanobacteria, nitrogen fixation, Guadeloupe 537
- foliage, Belize, damage 625

Avicennia germinans *cont.*
- mangroves
  - foliage, chemistry, iridoids, glucosides 8914
  - geographical distribution, Mexico 7264
  - roots, biomass, Cuba 7149
  - stomata, oscillation, leaf water potential 2839
- natural regeneration, recruitment, environmental factors, Belize 6575
- plant water relations 8817
- seedling growth, nutrient availability, light intensity 5386
- soil chemistry, flooding, USA 3937

Avicennia marina
- crabs, *Sesarma meinerti,* forest litter, degradation, South Africa 1523
- fisheries, Sri Lanka 9232
- foliage, chemistry, seasonal variation, aging, Pakistan 7192
- insect pests, *Nephopterix syntaractis,* defoliation, Hong Kong 10038
- mangrove forests
  - remote sensing, synecology, India 6996
  - soil pollution, sediment, heavy metals, Australia 8828
- mangroves
  - foliage
    - Kenya, chemistry 4676
    - pigments, seasonal variation, India 4675
    - Saudi Arabia, heavy metals 2980
  - palaeoecology, pollen analysis, New Zealand 4759
  - phenology, forest litter, Australia 3704
  - plant growth regulators, seedling growth, plant physiology 4699
  - pneumatophores, gas exchange 2041
  - recalcitrant seeds, seed germination, seed development 3385-3386
  - reproductive behaviour, seed dispersal, Australia 3041
  - stand characteristics, Pakistan 3961
- natural regeneration, soil salinity, soil chemistry, light, Australia 3883
- photosynthesis, reviews, photoinhibition 5415
- pneumatophores, mangrove forests, algae, epiphytes, South Africa 7301
- recalcitrant seeds 3389
- salt tolerance, foliage, cytology 6424

Avicennia officinalis
- mangrove forests
  - increment, diameter, natural regeneration, Bangladesh 6177
  - remote sensing, synecology, India 6996
- mangroves
  - foliage, pigments, seasonal variation, India 4675
  - shoot cuttings, India 102
- natural regeneration, crabs, Bangladesh 7257

Avicennia schaueriana, soil chemistry, Brazil 1092

Azadirachta, planting stock, production, Thailand 2622

Azadirachta indica
- agroforestry
  - coppice, Burkina Faso 10117
  - India 10107
- allelopathy, foliage, extracts 3106
- branching, habit, India 2037
- foliage, extracts, *Prosopis cineraria,* seedling growth, allelopathy 2161
- forest decline, Sahel 1300
- forest nurseries
  - growing media, Dominican Republic 6088
  - irrigation, waste water, Niger 9473
- forest plantations, water harvesting, India, increment, biomass production 5173
- fuel plantations
  - irrigated stands
    - biomass production, water use efficiency, Kenya 6021

Azadirachta indica *cont.*
- fuel plantations *cont.*
  - irrigated stands *cont.*
    - stand density, increment, Kenya 6131
- fuelwood, India, calorific value 3361
- insect pests
  - *Achaea janata,* India, biological control 9149
  - *Coptotermes formosanus,* resistance 9137
  - India, biological control 5806
- insecticidal properties, reviews, plant extracts 4375
- interplanting, *Prosopis cineraria,* growth, India 2161
- medicinal plants, degraded forests, Sri Lanka 5851
- multipurpose trees, indigenous knowledge, Kenya 6384
- mycorrhizas, *Glomus aggregatum,* inoculation 4012
- parasitic plants, *Santalum album,* increment, India 186
- seed collection, handling, Kenya 2571
- seed germination, seed treatment, seedling growth 71
- seedling growth, photosynthesis, foliage, India 1261
- shelterbelts
  - crops, microclimate, Niger 7384, 8383
  - species trials, soil properties, India 3689
- shoot cuttings
  - growing media 864
  - India 98
- species trials
  - reclamation, sodic soils, India 712
  - Sri Lanka 5054
- throughfall, stemflow, interception, India 706
- tissue culture, embryo culture, culture media, micropropagation, India 2605
- wood anatomy, Indonesia 6407

Azanza garckeana, savanna woodlands, natural regeneration, farmland, Tanzania 3114

Azerbaijan
- mixtures, irrigated stands, increment, weeds 1004
- *Salix,* forest plantations, silviculture 1787

Bacillus, bacterial diseases, *Acer rubrum* 2289

Bacillus thuringiensis
- insect pests
  - *Choristoneura fumiferana,* pathogenesis 5727
  - *Lymantria dispar,* biological control, USA, reviews 5793

Bacillus thuringiensis* subsp. *kurstaki, bacterial insecticides, nontarget effects, streams, Canada 6644

Bacteria (*see also* Soil bacteria)
- *Azospirillum brasilense, Quercus ithaburensis,* nitrogen fixation, Israel, seedling growth 7407
- *Picea glauca × Picea engelmannii,* seedling growth, Canada 7926
- soil bacteria, Fabaceae, tropical forests, Brazil 9071

Bacterial diseases
- *Actinomyces, Acer rubrum* 2289
- *Agrobacterium tumefaciens, Pinus radiata,* genetic variation, resistance 5666
- amenity trees, UK, books 6
- *Bacillus, Acer rubrum* 2289
- broadleaves, Kazakhstan, disease vectors, *Rhamnusium gracilicorne* 10019
- control, amenity trees, arboriculture 10016
- *Elaeagnus,* Russia, disease vectors, *Scolytus jaroshevskii* 10017
- *Erwinia amylovora*
  - *Crataegus,* flowering, Netherlands, control 612
  - *Sorbus,* USA 9122

- **Bacterial diseases** *cont.*
  - *Pseudomonas solanacearum, Tectona grandis,* forest nurseries, Bangladesh, control 6638
  - *Pseudomonas syringae*
    - *Laurus nobilis,* Italy 613
    - *Nerium oleander,* pathogenicity 8316
    - *Parrotia persica,* Iran 8315
    - *Rhaphiolepis umbellata,* galls, Japan, new species 2287
    - Salicaceae, Sweden 8317
    - *Syringa vulgaris,* Italy 613
  - *Streptomyces,* reviews 9123
  - *Ulmus,* Russia, Kazakhstan 10018
  - *Xanthomonas*
    - *Populus,* clones, resistance, Netherlands 1465
    - *Salix dasyclados,* clones, resistance, Netherlands 1465
  - *Xanthomonas populi, Populus,* Belgium, research 611
  - *Xylella fastidiosa*
    - *Quercus,* USA 2288
    - *Quercus macrocarpa,* USA, new host records 8314
    - street trees, USA 8314
    - *Ulmus,* USA, damage 4023
- ***Bactris gasipaes***
  - mycorrhizas, *Glomus aggregatum,* seedling growth 2250
  - soil chemistry, phosphorus, seedling growth 2250
- ***Baeckea camphorosmae,*** seed germination, temperature 76
- **Bahamas,** marine fungi, *Halophytophthora,* mangrove forests, forest litter 9066
- **Bahrain,** medicinal plants, books 3295
- ***Baikiaea plurijuga,*** woodlands, ecology, Zimbabwe, bibliographies 7634
- ***Bajacalifornioxylon cienense,*** old and fossil wood, wood anatomy, Mexico 2022
- ***Balanites aegyptiaca,*** forest plantations, sand dune stabilization, Senegal 4939
- **Balloons,** forest fires, fire suppression, Russia 4611
- ***Balsamocarpon brevifolium,*** fruits, production, afforestation, Chile 6146
- **Bamboo mosaic potexvirus,** viral diseases, *Bambusa oldhamii,* Taiwan 5671
- **Bamboos**
  - *Bambusa*
    - stems, morphology, age, Bangladesh 6419
    - tissue culture, bud culture, micropropagation 6047
  - *Bambusa arundinacea*
    - biomass production, plantations, India 1804
    - seeds
      - irradiation, seed germination, seedling growth 70
      - storage, India 2574
    - taxonomy, nomenclature, India 3854
  - *Bambusa beecheyana,* tissue culture, somatic embryogenesis 7805
  - *Bambusa blumeana,* afforestation, grasslands, Philippines 8394
  - *Bambusa burmanica,* India 515
  - *Bambusa multiplex*
    - insect pests
      - *Lepidomyctides nagaii,* South East Asia 7465
      - *Pseudoregma bambucicola,* Japan 9145
  - *Bambusa oldhamii,* viral diseases, bamboo mosaic potexvirus, Taiwan 5671
  - *Bambusa pallida*
    - genetic variation, induced mutations, plant morphology 5558
    - tree breeding, genetic variation, India 1433
  - *Bambusa tulda*
    - planting season, irrigation, India 2673
    - vegetative propagation, India 101
  - *Bambusa vulgaris*
    - cleaning, yields, Indonesia 1800
    - shoot cuttings 107
    - somatic embryogenesis 1702
    - tissue culture, micropropagation, culture media 9442
- **Bamboos** *cont.*
  - Bhutan 9887
  - birds, Passeriformes, USA, habitats, bird control 6677
  - Brazil, reviews 7223
  - *Chusquea,* rain forests, Peru, forest ecology 538
  - *Chusquea culeou,* Argentina, biology 1201
  - *Chusquea tessellata,* stand structure, biomass, Colombia 3080
  - *Dendrocalamus*
    - somatic embryogenesis 1702
    - tissue culture, bud culture, micropropagation 6047
  - *Dendrocalamus giganteus,* stems, anatomy, morphology, development 6418
  - *Dendrocalamus hamiltonii,* natural regeneration, shifting cultivation, India 8426
  - *Dendrocalamus membranaceus,* tissue culture, cell culture, protoplasts 8587
  - *Dendrocalamus strictus*
    - biomass production, cycling, India 2701
    - seed germination, plant growth regulators 3380
  - diseases, research 5566
  - ethnobotany, reviews, Latin America 9562
  - *Gigantochloa,* cleaning, yields, Indonesia 1800
  - *Gigantochloa scortechinii*
    - stand characteristics, biomass production, Peninsular Malaysia 6962
    - wood anatomy, fibres, wood chemistry, Malaysia 204
  - *Hickelia,* taxonomy 8966
  - *Himalayacalamus hookerianus*
    - taxonomy
      - India, utilization 8453
      - ornamental woody plants
        - New Zealand 8453
        - UK 8453
  - insect pests, Thailand 9135
  - *Melocanna baccifera,* stems, morphology, age, Bangladesh 6419
  - *Merostachys,* taxonomy, Brazil 6519
  - monographs 2452
  - *Neomicrocalamus mannii,* endangered species, India 733
  - Nepal 8969
  - *Phyllostachys bambusoides,* carbon cycle, biomass production, Japan, simulation 4530
  - *Phyllostachys edulis,* plant composition, pectins 9833
  - plantations
    - demonstration forests, Philippines 9563
    - forest litter, nutrients, India 9704
  - reclamation, degraded forests, India 9249
  - research, Indonesia, conferences 2480
  - *Sasa kurilensis,* control, *Fagus crenata,* natural regeneration, Japan 4346
  - *Sasa palmata,* understorey, *Fagus crenata,* Japan 3117
  - seeds, storage, India 977
  - shoot cuttings 1801
  - silviculture, management, India 9561
  - *Sinarundinaria nagalandiana,* taxonomy, new species, plant morphology, India 7219
  - *Thamnocalamus,* epidermis, anatomy 9789
  - *Thyrsostachys siamensis*
    - seed germination, plant growth regulators 3380
    - thinning, Thailand, disease resistance, pest resistance 1775
  - *Yushania niitakayamensis,* population genetics, Taiwan, random amplified polymorphic DNA 5547
- ***Bambusa***
  - forest nurseries, fertilizers, sewage, India 6905
  - vegetative propagation, indigenous knowledge, Nepal 6883
- ***Bambusa arundinacea***
  - bamboos
    - biomass production, plantations, India 1804
    - seeds
      - irradiation, seed germination, seedling growth 70
      - storage, India 2574
    - taxonomy, nomenclature, India 3854
    - tissue culture, bud culture, micropropagation 6047
- ***Bambusa balcooa,*** bamboos, stems, morphology, age, Bangladesh 6419
- ***Bambusa bambos***
  - bamboos, taxonomy, nomenclature, India 3854
  - farm forestry, soil fertility, India 2902
  - plantations, forest litter, nutrients, India 9704
  - self pollination, albinos 8954
- ***Bambusa beecheyana,*** bamboos, tissue culture, somatic embryogenesis 7805
- ***Bambusa blumeana,*** bamboos, afforestation, grasslands, Philippines 8394
- ***Bambusa burmanica,*** bamboos, India 515
- ***Bambusa longispiculata,*** bamboos, stems, morphology, age, Bangladesh 6419
- ***Bambusa multiplex***
  - bamboos, insect pests, *Pseudoregma bambucicola,* Japan 9145
  - insect pests, *Lepidomyctides nagaii,* South East Asia 7465
- ***Bambusa oldhamii,*** viral diseases, bamboo mosaic potexvirus, Taiwan 5671
- ***Bambusa pallida***
  - bamboos
    - genetic variation, induced mutations, plant morphology 5558
    - tree breeding, genetic variation, India 1433
- ***Bambusa tulda***
  - bamboos
    - planting season, irrigation, India 2673
    - stems, morphology, age, Bangladesh 6419
    - vegetative propagation, India 101
- ***Bambusa vulgaris***
  - bamboos
    - cleaning, yields, Indonesia 1800
    - shoot cuttings 107
    - somatic embryogenesis 1702
    - stems, morphology, age, Bangladesh 6419
    - tissue culture
      - bud culture, micropropagation 6047
      - micropropagation, culture media 9442
  - shoot cuttings, India 871
- **Bangladesh**
  - *Acacia auriculiformis,* forest plantations, weight tables 1001
  - *Acacia mangium*
    - forest plantations
      - biomass production, equations, weight tables 6975
      - volume tables, volume determination, equations 6173
  - *Avicennia officinalis,* natural regeneration, crabs 7257
  - bacterial diseases, *Pseudomonas solanacearum, Tectona grandis,* forest nurseries, control 6638
  - bamboos
    - *Bambusa,* stems, morphology, age 6419
    - *Melocanna baccifera,* stems, morphology, age 6419
  - broadleaves
    - forest nurseries, containers, seedling growth, survival 6076
    - root cuttings 6045
    - species trials, mangrove forests 6017
  - *Bruguiera sexangula,* natural regeneration, crabs 7257
  - canes and rattans
    - forest resources 810
    - genetic resources 1574
  - *Ceriops decandra,* natural regeneration, crabs 7257
  - choice of species, farm forestry 6717

- **Bangladesh** *cont.*
  - *Dipterocarpus turbinatus,* forest plantations, volume tables, volume determination, equations 6172
  - education, training 4248
  - *Excoecaria agallocha,* natural regeneration, crabs 7257
  - farm forestry, surveys, trees, products, utilization 1548
  - forestry, research institutes, bibliographies 2458
  - fungal diseases
    - *Corticium salmonicolor, Eucalyptus camaldulensis,* cankers 6633
    - *Nigrospora sphaerica, Artocarpus heterophyllus,* foliage 6636
    - *Pestalotiopsis versicolor, Artocarpus heterophyllus,* foliage 6636
  - *Heritiera fomes,* natural regeneration, crabs 7257
  - insect pests, *Indarbela quadrinotata, Paraserianthes falcataria,* chemical control 6666
  - mangrove forests
    - increment, diameter, natural regeneration 6177
    - plant succession, seral stages, soil properties 284
  - mangroves
    - forest plantations, sustainability, underplanting 6108
    - *Nypa fruticans,* afforestation, site requirements, tides 7776
  - multipurpose trees, choice of species, farm forestry 6716
  - *Piper chaba,* bark, medicinal plants, plant composition 9816
  - *Rhizophora mucronata,* natural regeneration, crabs 7257
  - tropical forests, natural regeneration, forest management, forest plantations 6105
  - wildlife, crabs, mangroves, natural regeneration 7257
  - *Xylocarpus mekongensis,* natural regeneration, crabs 7257
- ***Banksia,*** invasion, choice of species, fynbos, South Africa, expert systems 9359
- ***Banksia attenuata***
  - fungal diseases
    - *Phytophthora cinnamomi*
      - Australia 9096
        - chemical control 8320
- ***Banksia baxteri,*** stand characteristics, forest fires, plant water relations, Australia 6577
- ***Banksia brownii,*** reproductive behaviour, population genetics, endangered species, Australia 3825
- ***Banksia coccinea,*** stand characteristics, forest fires, plant water relations, Australia 6577
- ***Banksia ericifolia,*** vegetative propagation, shoot cuttings, roots 2582
- ***Banksia integrifolia,*** taxonomy, Australia 2117
- ***Banksia marginata,*** sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954
- ***Banksia menziesii,*** habit, reproductive behaviour, plant water relations, Australia 3032
- ***Banksia oblongifolia,*** tissue culture, culture media, planting stock 5073
- ***Banksia prionotes,*** plant nutrition, translocation, Australia 1288
- ***Banksia pulchella,*** stand characteristics, forest fires, plant water relations, Australia 6577
- ***Banksia serrata***
  - foliage, optical properties, Australia 6222
  - tissue culture, culture media, planting stock 5073
- ***Banksia speciosa,*** stand characteristics, forest fires, plant water relations, Australia 6577
- ***Baphia nitida,*** browse plants, insect pests, Nigeria 8325
- **Bark**
  - *Abies sachalinensis,* chemistry, extractives 1247
  - *Acacia mearnsii,* chemistry, tannins 5389
  - anatomy
    - *Argemone fruticosa* 2023
    - *Gnetum gnemon* 3722
    - injuries, *Abies alba,* forest decline 4626
    - *Parashorea malaanonan,* taxonomy, identification, Philippines 413
    - *Shorea,* taxonomy, identification, Philippines 413
  - *Apodytes,* taxonomy, anatomy 399
  - *Betula,* lichens, air pollution, Finland, chemistry 7996
  - *Betula platyphylla*
    - biodeterioration, betulin 9822
    - chemistry, betulin 1241
  - broadleaves
    - anatomy 4624
    - crystals, diagnostic value 6410
  - *Carapa procera,* extractives, bioassays 6444
  - *Caryodaphnopsis tonkinensis,* benzofurans 8085
  - *Cassinopsis,* taxonomy, anatomy 399
  - chemistry
    - broadleaves, air pollution, Netherlands, trace elements 3749
    - forest trees, esters 1253
    - *Populus tremula,* epiphytes, soil chemistry, Sweden 8168
  - *Cinnamomum,* essential oils, Sri Lanka 416
  - conifers, stemflow, France, pH, conductivity 3021
  - damage, *Taxus brevifolia,* increment, USA 1005
  - *Ehretia ovalifolia,* chemistry, glucosides, lignans 9831
  - *Erythrina senegalensis,* isoflavones 8911
  - essential oils, *Guarea cedrata,* Central African Republic 6439
  - Fabaceae, medicinal plants, ethnobotany, India 4373
  - *Fagus sylvatica,* plant composition, suberin 6461
  - forest trees
    - edible species, cooking, palatability 1810
    - volume, increment, Spain, equations 5961
  - *Guibourtia tessmanii,* glycosides 9808
  - *Maackia amurensis,* isoflavones 9811
  - measurement, broadleaves 5952
  - *Michelia champaca,* roots, sesquiterpenoid lactones 9805
  - monoterpenes
    - variation
      - *Larix,* provenance, Poland 1428
      - *Pinus sylvestris,* provenance, Poland 1427
  - monoterpenoids, *Pinus radiata,* genetic variation, New Zealand 4824, 4826
  - *Nauclea diderrichii,* terpenoids 9799
  - *Ocotea bullata,* neolignans 8084
  - *Picea abies,* genetic variation, Italy, terpenoids 2060
  - *Pinus,* lichens, air pollution, Finland, chemistry 7996
  - *Pinus contorta,* forest fires, feeding behaviour, *Cervus elaphus* 3200
  - *Pinus sylvestris,* air pollution, sulfates, Europe 8848
  - *Piper chaba,* medicinal plants, Bangladesh, plant composition 9816
  - *Piper guineense,* extractives, bioassays 6444
  - *Piptostigma fugax,* chemistry, alkaloids 8915
  - *Platycarya strobilacea,* Japan, chemistry, tannins 6462
  - *Populus* 'Robusta', girdling, proteins 6500
  - proteins
    - insect pests, *Cryptococcus fagisuga, Fagus sylvatica,* Germany 1480
    - storage, *Populus deltoides,* gene expression 5534
- **Bark** *cont.*
  - resins, *Pterocarpus indicus,* plant diseases, lightning, Singapore 9857
  - reviews, *Sophora japonica,* chemistry, lectins 1248
  - *Robinia pseudoacacia*
    - gene expression, lectins 2215
    - molecular genetics 5563
    - triterpenoids, glycosides 441
  - roots, *Erythroxylum monogynum,* chemistry, tropane alkaloids 8916
  - *Salix,* chemistry, polyphenols 7174
  - *Salix rorida,* chemistry, polyphenols 7174
  - Taxodiaceae, chemistry, proteins 3786
  - *Taxus,* chemistry, alkaloids, diterpenoids 8080
  - *Taxus baccata,* medicinal plants, plant composition, taxol, seasonal variation 8685
  - *Taxus brevifolia*
    - medicinal plants, USA, taxane 417
    - taxanes, methodology 2496
  - *Taxus cuspidata,* chemistry, extractives 3738
  - *Taxus wallichiana,* taxanes 9809
  - thickness
    - forest trees, fire resistance, USA 1197
    - variation, *Pinus contorta,* provenance, Sweden 990
- **Bark beetles** (*see* Insect pests)
- ***Barringtonia,*** photosynthesis, photoinhibition, Papua New Guinea, simulation, canopy gaps 1287
- ***Barringtonia calyptrocalyx,*** photosynthesis, photoinhibition, Papua New Guinea, simulation, canopy gaps 1287
- **Basal area** (*see also* Angle count)
  - *Castanea sativa,* stand structure, drainage, soil properties, Spain 9574
  - forest trees, stand density, Romania, allometry 8662
  - *Fraxinus excelsior,* stand characteristics, Romania 8661
  - measurement, *Pinus sylvestris,* sample plot technique, Poland 993
  - *Pinus taeda,* foliage, USA, correlation 2927
  - *Populus tremula,* Russia 1818
- **Basidiomycotina**
  - deciduous forests, forest litter, cycling, UK 9713
  - fungal diseases, *Larix leptolepis,* Japan, site factors, soil 6626
  - mycorrhizas, forest trees 5597
- ***Basileura osornoensis,*** insect pests, *Nothofagus dombeyi,* Chile, new species 2329
- **Bats,** *Ficus luschnathiana,* seed dispersal, seed germination, Brazil 9881
- ***Bauhinia,*** root nodules, surveys 2235
- ***Bauhinia petersiana,*** seed germination, seedling growth, soil chemistry, carbon, Zambia 5239
- ***Bauhinia retusa,*** shoot cuttings, India 113
- ***Bauhinia thonningii***
  - population dynamics, savannas, Côte d'Ivoire, simulation 2511
  - savanna woodlands, natural regeneration, farmland, Tanzania 3114
- ***Bauhinia variegata***
  - biomass production, Nepal, equations 6965
  - degraded forests, stand structure, synecology, India 213
  - fodder, choice of species, Nepal 6948
  - forest nurseries, plant nutrition, nitrogen, phosphorus, India 8597
  - insect pests, *Didia,* Pakistan, seeds 5679
  - seed germination, seed treatment, India 858
  - short rotation forestry, biomass production, India 1736
- **Bauxite residues,** species trials, reclamation, Australia 67
- **Beating up**
  - *Picea abies,* forest plantations, increment, plant morphology, Sweden 9529
  - *Pinus sylvestris,* forest plantations, increment, plant morphology, Sweden 9529

Beating up *cont.*
  planting, work study, Canada 7771
Beekeeping
  agroforestry 8682
  forestry 8682
  nectar plants, forestry, South Africa 6150
  Tilia, spacing, USA 6950
  urban forestry, South Africa 6951
Bees (*see* Honey bees)
Beilschmiedia angustielliptica, taxonomy, Mexico 6517
Beilschmiedia bancroftii, rain forests, seeds, survival, predation, Australia 4050
Beilschmiedia pendula, fungal diseases, Panama, resistance 2272
Beilschmiedia sulcata, cloud forests, clear felling, plant succession, Venezuela 5458
Beilschmiedia tarairi, synecology, canopy gaps, natural regeneration, New Zealand 1413
Belangera glabra, wood anatomy 6430
Belarus
  conifers, isoenzymes, gene mapping 9044
  fallout, forestry 9408
  insect pests, *Lymantria,* biological control, parasitoids 10055
  Pinus sylvestris
    air pollution
      amenity and recreation areas, increment 6326
      photosynthesis 6352
    genetic variation, isoenzymes, gene flow 571
    stand characteristics, botanical composition 1364
    stand density, forestry practices, stem form 5156
    yield forecasting, groundwater 8714
  pollution, fallout, forest fires 9736
Belgium
  afforestation, agricultural land 9244
  bacterial diseases, *Xanthomonas populi, Populus,* research 611
  birds
    Bonasa bonasia, Corylus avellana, stand characteristics, habitats 10068
    Picea abies, ecology 4909
    Sitta europaea, deciduous forests, fragmentation 7514
  broadleaves
    cycling, calcium, leaching 3624
    forest influences, soil chemistry, site factors, classification 8999
    silvicultural systems, stand characteristics 949
  forest inventories
    remote sensing, geographical information systems, stand characteristics 259
    sampling, methodology 4432
  forest recreation 9307
  fungal diseases
    Melampsora, Populus, research 611
    Ophiostoma roboris, Quercus robur 7398
  insect pests
    Operophtera brumata, Quercus, ecology 5717
    Phyllaphis fagi, Fagus sylvatica, plant nutrition, forest nurseries 8328
  land use, multiple use, conferences 6804
  mixed forests, stand structure, increment, forest management 6941
  mycorrhizas, forest trees, seasonal variation 1445
  Picea abies
    canopy, precipitation, leaching 4082
    stand structure, simulation 4359
  Populus
    carbon dioxide enrichment, biomass production, photosynthesis 8112
    short rotation forestry, height, border effects 8700
  Quercus
    forest decline, monitoring 8940
    forest health, monitoring 8940
    silviculture
      books 4159
Belgium *cont.*
  Quercus cont.
    silviculture *cont.*
      site factors, wood properties 8860
  soil pH, ground vegetation 9691
Belize
  birds, dead trees, vegetation types 1515
  mangroves
    foliage, damage 625
    natural regeneration, recruitment, environmental factors 6575
  medicinal plants, ethnobotany, books 745
  Pinus patula, progeny testing, wood density 3979
  remote sensing, radar, land use 1864
  riparian forests
    biodiversity, stand structure, palaeoecology 3960
    forest ecology, disturbance 1417
    species diversity, fragmentation 6547
Belotia mexicana, wood anatomy 4630
Berberis aristata
  biomass production, India, equations 789
  seeds, storage, seed germination, reclamation, India 79
Berberis thunbergii, plant morphology, habit, taxonomy, Poland 1207
Berchemia discolor, browse, indigenous knowledge, Kenya 6669
Berlinia, wood chemistry, esters 1253
Bermuda, mangroves, synecology, sea water 525
Berries (*see* Fruits)
Bertholletia excelsa
  age of trees, Brazil 4380
  reproductive behaviour 2106
Betula
  air pollution
    runoff, soil chemistry, Norway, nitric acid 5320
    tolerance, reviews 1149
  bark, lichens, air pollution, Finland, chemistry 7996
  biomass production, energy, conferences 4999
  boreal forests, thinning, biomass production, Russia 9527
  deciduous forests, pollen analysis, atmosphere, Norway 475
  forest fires, Finland, mortality 8032
  forest litter, decomposition, carbon-nitrogen ratio 8790
  improvement fellings, mechanization, Finland, economics 5161
  insect pests
    Hymenoptera, air pollution, Russia 663
    Lepidoptera
      Canada, behaviour 5716
      Sweden, population dynamics, interactions 5714
    Papilio canadensis, USA 5712
  lignin, cell walls 1239
  plant nutrition, pioneer species, Germany 2850
  pollen, allergens, Finland 1650
  provenance trials, air pollution, tolerance, Poland 1150
  soil chemistry
    acidification, clay minerals, Sweden 291
    cation exchange capacity, Canada 5250
  soil pollution, tolerance, reviews 1149
  species trials, air pollution, tolerance, Poland 1150
  street trees, tree injection, nutrients, soil air, UK 10143
  transplanting, Germany 4979
  weed control, herbicides, USA 942
  wildlife, weed control, woody weeds, Norway 10070
  wind damage, Netherlands 1062
Betula aetnensis, autecology, Sicily 1330
Betula alba (*see also Betula pendula; Betula pubescens*)
  acid deposition, watersheds, hydrology, Finland, acidification 6333
  air pollution, Russia, fluorine, damage 1962
Betula alba *cont.*
  deer, *Alces alces,* stand development, Russia 7530
  foliage, air pollution, heavy metals, Finland, insect pests 4886
  insect pests, *Eriocrania,* Finland, air pollution 4886
  seedlings, sap flow, measurement 3618
  wood properties, wood anatomy, methodology, boring 2494
Betula alleghaniensis
  air pollution, nitrogen, stand characteristics, USA 1155
  biomass, equations, allometry, USA 4195
  carbon dioxide enrichment
    heat stress, plant nutrition, interactions 3547
    light, plant succession, USA 3099
  container grown plants, buds, dormancy, frost resistance, Canada 4477
  deciduous forests, natural regeneration, seed banks, Canada 3119
  defence mechanisms, *Lepus americanus,* evolution, USA 4915
  frost injury, climate, North America 9672
  light, soil water, increment, USA 5181
  mammals, *Lepus americanus,* browsing damage, USA 4919
  reproductive behaviour, Canada 478
  root systems, measurement 2034
  roots, USA, growth 1229
  seedling growth, biomass distribution, plant nutrition 6426
  soil amendments, lime, seed banks, USA 6898
  wildlife, birds, herbicides, Canada 5829
  wind damage, stand structure, USA, growth 277
Betula atrata
  provenance trials, air pollution, tolerance, Poland 1150
  species trials, air pollution, tolerance, Poland 1150
Betula coerulea-grandis
  provenance trials, air pollution, tolerance, Poland 1150
  species trials, air pollution, tolerance, Poland 1150
Betula costata
  provenance trials, air pollution, tolerance, Poland 1150
  species trials, air pollution, tolerance, Poland 1150
Betula ermanii
  boreal forests, Russia, botanical composition 9926
  histology, trichomes, plant composition, resins, defence mechanisms 2985
  insect pests, *Heterarthrus betulae,* Japan 665
Betula fruticosa, boreal forests, natural regeneration, Russia, simulation, management 9965
Betula glandulosa, forests, evapotranspiration, Canada, simulation 7948
Betula grossa, stand structure, Japan, climax communities, spatial distribution 8157
Betula jacquemontii, photosynthesis, heat tolerance 4688
Betula lanata, stand characteristics, Russia 2153
Betula lenta
  air pollution, nitrogen, stand characteristics, USA 1155
  defence mechanisms, *Lepus americanus,* evolution, USA 4915
  mammals, *Lepus americanus,* browsing damage, USA 4919
  root systems, nitrogen 2020
Betula lutea (*see Betula alleghaniensis*)
Betula mandshurica (*see Betula platyphylla*)
Betula maximowicziana, stemflow, pH, soil chemistry, acidification, Japan 1992
Betula nana
  hybrids, insect pests, Finland 7427
  insect pests, Scandinavia, host parasite relationships, theory 4029
  molecular genetics, mapping, Iceland 9056

Betula nigra
  forest nurseries, container grown plants, roots 4137
  frost resistance, climate, simulation, USA 800
  grafting, rootstock scion relationships 8575
  photosynthesis, heat tolerance 4688
  rootstocks, flooding tolerance, plant physiology 2589
  shade trees, USA, evaluation 8457
Betula obscura, distribution, synecology, taxonomy, Poland 1337
Betula occidentalis
  plant water relations
    cavitation, variation, measurement 3602
    transpiration, USA 8805
Betula papyrifera
  acid deposition, reproductive behaviour, Canada 3659
  air pollution
    nitrogen, stand characteristics, USA 1155
    sulfur dioxide, biochemistry, detoxification 3779
  boreal forests, forest health, monitoring, Canada 9866
  defence mechanisms, *Lepus americanus*, evolution, USA 4915
  food plants, silkworms, Saturniidae, carbon dioxide enrichment 8683
  forest fires, treelines, global warming, Canada 3700
  forest litter, decomposition, Canada, nitrogen, availability 7912
  frost injury, climate, North America 9672
  grafting, rootstock scion relationships 8575
  histology, trichomes, plant composition, resins, defence mechanisms 2985
  insect pests
    Choristoneura fumiferana, natural regeneration, USA 1487
    Lymantria dispar
      carbon dioxide enrichment, plant composition 5711
      USA, resistance 2318
  mammals, *Lepus americanus*, browsing damage, USA 4919
  mixtures, increment, Canada 4361
  natural regeneration, scarification, USA 939
  photosynthesis, heat tolerance 4688
  rootstocks, flooding tolerance, plant physiology 2589
  snow damage, USA 4483
  stomatal resistance, gas exchange, simulation, Canada 801
  thinning, plant physiology, Canada, effects 9516
  wildlife, birds, herbicides, Canada 5829
Betula pendula (*see also Betula alba*)
  air pollution, ozone, biochemistry, genetic variation 2880
  arboricides, laboratory tests 783
  autecology
    Europe 386
    UK 386
  bark
    anatomy 4624
    crystals, diagnostic value 6410
    edible species, cooking, palatability 1810
    fodder, rodents, *Microtus agrestis*, Finland 6678
  browsing damage
    Lepus timidus, Finland, resistance 3221
    Microtus agrestis, Finland, resistance 3221
  carbon dioxide enrichment
    biomass production, plant nutrition 7862
    plant nutrition, plant composition, secondary metabolites, carbohydrates 4665
    temperature, seedling growth, photosynthesis, transpiration 2997
  cell culture 875
  fallout, uptake, Ukraine 1954
Betula pendula *cont.*
  farm forestry, natural regeneration, artificial regeneration, Sweden 6921
  fertilizers
    ash, seedling growth, Finland 898
    paper mill sludge, seedling growth, Finland 898
  foliage
    anatomy, air pollution, ozone, Finland 6336
    cuticle, absorption, ozone 3661
    phenology, defoliation, plant nutrition, temperature 4617
  forest influences, atmosphere, Austria, volatile compounds 8015
  forest litter
    decomposition, carbon dioxide enrichment, plant nutrition, nitrogen 7900
    soil biology, soil chemistry, heavy metals, Finland 7934
    streams, UK, fauna 5252
  forest nurseries, herbicides, UK, tolerance 2644
  frost resistance, roots, Russia 279
  gene expression
    pollen, allergens 5542
    proteins 7368
  genetic transformation 7379
  gibberellins 3795
  grafting, rootstock scion relationships 8575
  heavy metals, nutrient uptake 7056
  histology, trichomes, plant composition, resins, defence mechanisms 2985
  insect pests
    Chrysomela lapponica, plant composition 2352
    Coleophora serratella, UK, interactions 2320
    Eriocrania, UK, interactions 2320
  ionizing radiation, damage, seed germination, Ukraine 7979
  light
    biomass, plant morphology, Finland 9667
    nitrogen fertilizers, Finland, browsing damage 3221
  mammals, *Castor fiber*, Germany 6674
  micropropagation 7743
  mixtures, *Larix sibirica*, root systems, plant competition, Russia 2656
  mycorrhizas
    Paxillus involutus 8283
      biochemistry, proteins 5571
      reclamation, UK 4096
      soil pH, nutrition physiology 5583
  natural regeneration, clear felling, Sweden 3439
  natural thinning, Finland, mathematical models 9959
  nitrogen cycle, air pollution, ozone, Finland 7096
  nutrient deficiencies
    phosphorus, toxicity, aluminium 7919
    simulation, growth, nutrient allocation 7077
  nutrition physiology, manganese 324
  ozone, biomass production, plant physiology, diurnal variation 6191
  photosynthesis
    chlorophyll 3788
    heat tolerance 4688
  plant morphology, habit, taxonomy, Poland 1207, 1322
  plant nutrition
    root shoot ratio 7955
    trace elements 1148
  planting stock, micropropagation, seedlings, increment, Finland 7766
  pollen
    allergens, house dust, Finland 7711
    morphology, histochemistry 9796
  provenance trials, air pollution, tolerance, Poland 1150
  reclamation
    landfills, species trials, plant nutrition, UK 4948
    mine spoil, UK, soil amendments 6708
Betula pendula *cont.*
  rodents, damage, provenance trials, Sweden 4055
  root systems, genetic variation, UK 1439
  rootstocks, flooding tolerance, plant physiology 2589
  seed production
    flowering, increment 7727
    micropropagation, grafts, seedlings 7726
  seedlings
    plant nutrition
      cadmium, copper, uptake 7971
      nutrient deficiencies, magnesium, growth 5292
  shoots
    phenology, temperature, genetic variation 8041
    vegetative propagation, habit, UK 410
  soil toxicity, cadmium, plant nutrition, seedling growth 4501
  somatic embryogenesis 875
  spacing
    increment, Finland 9532
    wood properties, Finland 9531
  species trials, air pollution, tolerance, Poland 1150
  stand characteristics, silviculture, Croatia 4363
  synecology, botanical composition, geographical distribution, Russia 1353
  taxonomy
    new taxa, Finland 498
    plant morphology, habit, Poland 2114
  thinning, stems, quality, wood properties, Western Europe 9519
  tissue culture
    light, photosynthesis, foliage 8581
    micropropagation, planting stock, performance, light 6056
  tree breeding, progeny testing, phenology, growth rate, Finland 9980
  vegetative propagation 4288
  viral diseases, Germany 8318
  weed control, seedling growth, Finland 3450
  wildlife, *Alces alces*, browse, forests, Poland 7534
  wood anatomy, development, UK, growth effects 1988
  yield forecasting, remote sensing, simulation, Estonia 1866
Betula pendula × Betula pubescens, tissue culture, callus, culture media 120
Betula pendula* f. *carelica, shoot cuttings, rooting, lasers 5077
Betula platyphylla
  bark
    biodeterioration, betulin 9822
    chemistry, betulin 1241
  crown, biomass, Japan, measurement 1843
  grafting, rootstock scion relationships 8575
  histology, trichomes, plant composition, resins, defence mechanisms 2985
  photosynthesis, heat tolerance 4688
  provenance trials, air pollution, tolerance, Poland 1150
  rootstocks, flooding tolerance, plant physiology 2589
  seedlings, phenology, carbon dioxide enrichment, temperature, soil fertility 7864
  species trials, air pollution, tolerance, Poland 1150
  stand density, plant competition, Japan, yield forecasting 8697
Betula populifolia
  air pollution, nitrogen, stand characteristics, USA 1155
  carbon dioxide enrichment
    heat stress, plant nutrition, interactions 3547
    light, plant succession, USA 3099
  root systems, measurement 2034
  seedling growth, biomass distribution, plant nutrition 6426
  seedlings, plant competition, old fields, USA 7308
Betula pubescens (*see also Betula alba*)

Betula pubescens *cont.*
- air pollution
  - fluorides, foliage, damage, Norway 5330
  - foliage
    - chemistry, TCA, Finland 338
    - defoliation, Finland, TCA 1165
  - ozone, temperature, light, damage 9753
  - plant water relations 1970, 7090
- autecology
  - Europe 386
  - UK 386
- buds, dormancy, plant physiology, plant growth regulators 3767
- carbon dioxide enrichment, biomass 3537
- coppice, buds, dormancy, plant physiology, seasonal variation 1209
- coppicing, sap flow, cytokinins, growth 3804
- farm forestry, natural regeneration, artificial regeneration, Sweden 6921
- forest litter
  - decomposition, Sweden 6281
  - Sweden, chemical composition 4494
- fungal diseases
  - *Taphrina betulina*
    - increment, witches' brooms, UK 5663
    - UK 5662
- geographical distribution, nature conservation, Greece 1575
- histology, trichomes, plant composition, resins, defence mechanisms 2985
- insect pests
  - *Coleophora serratella,* UK, interactions 2320
  - *Eriocrania,* UK, interactions 2320
- lichens, air pollution, aluminium, Finland 8843
- light, biomass, plant morphology, Finland 9667
- molecular genetics, mapping, Iceland 9056
- natural regeneration, clear felling, Sweden 3439
- phenology, climatic change, Europe 4618
- plant morphology, habit, taxonomy, Poland 1207, 1322
- plant succession, moraine soils, Norway 1404
- pollination, pollen germination 3039
- roots, chemistry, seasonal variation, Sweden 9826
- shoot cuttings, micropropagation, plant morphology, rooting 5067
- synecology, botanical composition, geographical distribution, Russia 1353
- treelines
  - Russia, distribution 7263
  - Scandinavia, distribution 7263
- wildlife, *Alces alces,* browse, forests, Poland 7534-7535
- witches' brooms, UK 5662
- yield forecasting, remote sensing, simulation, Estonia 1866

***Betula pubescens* × *Betula papyrifera*,** tissue culture, culture media, copper 2588

Betula resinifera
- defence mechanisms, *Lepus americanus,* evolution, USA 4915
- histology, trichomes, plant composition, resins, defence mechanisms 2985

***Betula szechuanica*,** grafting, rootstock scion relationships 8575

Betula tianschanica
- provenance trials, air pollution, tolerance, Poland 1150
- species trials, air pollution, tolerance, Poland 1150

Betula tortuosa
- abscission, plant nutrition, resorption, Sweden 6482
- buds, sexual reproduction, Finland 4731
- epiphytes, air pollution, indicator plants, Sweden 6334
- foliage
  - morphology, Finland, variation 2933
  - phenols, plant nutrition 2994
  - plant composition, Finland, variation 2933

Betula tortuosa *cont.*
- foliage *cont.*
  - plant water relations, Finland, variation 2933
- fungal diseases, *Melampsoridium betulinum,* Finland, acid deposition, heavy metals 5652
- hybrids, insect pests, Finland 7427
- insect pests
  - *Dineura viridiorsata,* Finland, biology 2361
  - *Polydrusus ruficornis*
    - Russia
      - damage 8336
      - ecology 2351
  - Scandinavia, host parasite relationships, theory 4029
- snow cover, Sweden, indicator species 1877

Betula utilis
- cloud forests, synecology, altitude, land use, Nepal 1371
- micropropagation 7743
- mountain forests, cycling, India 3633
- treelines, India 1356

Betula verrucosa *(see Betula pendula)*

Bhutan
- bamboos 9887
- environmental management, sustainability, mountain areas, books 2453
- *Gliricidia sepium,* provenance trials 1671

Bibliographies
- agroforestry, Sahel 5934
- *Baikiaea plurijuga,* woodlands, ecology, Zimbabwe 7634
- biomass, for energy, research, Canada 8478
- *Brachystegia spiciformis,* woodlands, ecology, Zimbabwe 7634
- cloud forests 4148
- community forestry, forest management, resource management, Tropics 6795
- forest resources, research, USA 763
- forestry
  - Poland 1602
  - research
    - organizations, Poland 6792
    - Poland 761
  - research institutes, Bangladesh 2458
  - Sri Lanka 13
- *Libocedrus chilensis* 6793
- *Pyrus,* taxonomy, nomenclature, geographical distribution 7221
- rain forests, forest management, Africa South of Sahara 6794
- research, Australia 7707
- thinning, USA 2457
- tropical forests, reserved forests, Zimbabwe 7635
- urban forestry 8477
  - India, books 6775
- wood anatomy, dicotyledons 762

Bignoniaceae
- flowers, nectaries, morphology 8893
- nectar, chemistry 8893

Biochemistry
- *Abies balsamea,* cambium, IAA, seasonal variation 5403
- *Acer pseudoplatanus*
  - enzymes, tonoplast 3764
  - plasma membranes, transport 3763
  - proton pump, regulation 6499
- *Albizia lophantha,* foliage, nastic movements, light 1277
- antioxidants, light, stress, reviews 466
- *Betula papyrifera,* air pollution, sulfur dioxide, detoxification 3779
- *Betula pendula,* air pollution, ozone, genetic variation 2880
- *Cercis siliquastrum,* seed development 6421
- conifers, somatic embryogenesis, reviews 4287
- enzymes
  - *Picea abies,* foliage 3016
  - *Pinus sylvestris,* air pollution, sulfur dioxide, Germany 2883
  - *Pinus taeda,* air pollution, ozone 3657
  - *Populus* 'Robusta', starch 3787

Biochemistry *cont.*
- ethylene production
  - *Acer pseudoplatanus*
    - cell culture 8104
    - plant growth regulators, cell culture 7179
- phenolic compounds, *Salix myrsinifolia,* plant nutrition, nitrogen, seedling growth 6317
- *Picea abies*
  - air pollution, ozone, frost resistance 2882
  - foliage, air pollution, nitric oxide 3660
  - forest damage, diagnosis, Germany, reviews 6503
  - photosynthesis, photosystem II 3008
- *Pinus strobus,* air pollution, fluorides 6349
- *Pinus sylvestris*
  - air pollution
    - ammonia 3645
      - Germany 8847
    - plant physiology, stress factors, research 6494
    - seedlings, phytotoxicity, aluminium 7188
- *Pinus thunbergii,* photosynthesis, photosystem II 3004
- polyamines, *Populus tremula* × *Populus tremuloides,* tissue culture, roots, development 3774
- polypeptides, mycorrhizas, *Pisolithus tinctorius, Eucalyptus grandis* 5579
- *Populus,* plant water relations, water stress 1119
- *Populus maximowiczii* × *Populus trichocarpa,* ozone 453
- protein synthesis
  - *Pinus taeda,* seed dormancy, seed stratification 2576
  - *Prosopis chilensis,* heat resistance 3798
- *Quercus robur,* light, growth 2993
- ribulose-bisphosphate carboxylase, *Larix laricina,* molecular genetics, light 3981
- seasonal variation
  - *Pseudotsuga menziesii,* foliage, USA 1281
  - *Tsuga heterophylla,* foliage, USA 1281
- *Shorea robusta,* seeds, viability 3009
- starch, metabolism, seasonal variation, *Populus* 'Robusta', wood 2988
- *Vaccinium myrtillus,* plant physiology, stress factors, research 6494

Bioclimate, *Quercus pyrenaica,* geographical variation 1876

Biodeterioration, *Betula platyphylla,* bark, betulin 9822

Biodiversity
- afforestation, management, genetic resources 10126
- books 11
- coastal plant communities, synecology, Tanzania 1369
- community forestry, mountain forests, conservation, Cameroon 9293
- conifers, forest management, multiple use, New Zealand 6744
- conservation
  - forest management, planning, Finland 2722
  - forest plantations, models, India 4338
  - land use planning, multiple land use, Germany, techniques 8450
- ethnobotany, books, methodology 5918
- flora, nature conservation, India 7601
- forest management
  - France 9611
  - India 4975
  - landscape ecology, USA 4130
  - nature conservation
    - Cameroon 6196
    - Mediterranean Region, reviews 8438
    - UK 4998
    - USA, reviews 8438
  - reviews 1814
  - Tropics 4975

Biodiversity *cont.*
- forest plantations
  - forest management, Mediterranean Region 2640
  - New Zealand 6745
- forest policy
  - deforestation, climatic change 5023
  - forest management, nature conservation, Sweden 9387
- forest resources, nature conservation, USA 7631
- forest trees
  - seeds, conservation, research institutes, Australia 8549
  - tree breeding, conservation, Canada, research 3124
- forestry
  - Italy 5974
  - management, genetic resources 10126
  - nature conservation 7592
    - Brazil 6838
- forestry practices, Switzerland, conferences 6808
- forests
  - environment, economic development 40
  - monitoring, conferences, books 8473
  - nature conservation
    - afforestation, India 4969
    - forest plantations, India 4970
- fynbos, genetic resources, South Africa 530-531
- heathlands, Spain 7298
- land use, nature conservation 7565
- landscape, USA, analysis 3283
- mangrove forests, nature conservation, India 4971
- monitoring, forests, dynamics, databases 7685
- national parks
  - management
    - nature conservation, Nepal, buffer zones 8446
    - Nigeria 9305
  - tropical forests, nature conservation, India 5897
- nature conservation 1572
  - forest management 4968
  - management, wildlife conservation, India 5894
  - Nepal 10127
  - sustainability, forestry, India 4974
  - taxonomy, books, conferences 5921
  - Tropics
    - books 752
    - conferences 752
- *Quercus serrata*, coppice, forest fragmentation, Japan 8403
- rain forests
  - conservation, sustainability, Ecuador 9300
  - forest fragmentation, mammals, Mexico 9205
  - land use, sustainability, Brazil 3352
  - nature conservation, projects, Cameroon 7600
  - stand structure, Australia 2155
- riparian forests
  - France, conservation 4128
  - Germany, conservation 4128
  - stand structure, Belize, palaeoecology 3960
- trade, international trade, international agreements, intellectual property rights, India 9389
- tropical forests
  - Africa, arthropods, soil fauna 5037
  - deforestation 6719
    - nature conservation, China 9006
  - nature conservation 6837
- valuation, boreal forests, conferences 2483
- vegetation types
  - nature conservation, Canada 6747
  - photosynthesis, Russia 7198

Biogeochemistry
- bottomland forests, logging, USA 7270
- caatinga, controlled burning, Brazil, nutrients 2922
- conifers, acid deposition, throughfall, soil chemistry, Europe 3664

Biogeochemistry *cont.*
- forest ecology, cycling, conferences 3310
- forest trees
  - cycling, USA 2814
  - nutrient deficiencies 7974
- old-growth forests
  - Temperate Zones, cycling, Chile 5296
  - USA 8825
- *Picea*, biomass production, plant nutrition, cycling, Russia 7970
- *Picea rubens*, USA, aluminium 8827

Biographies
- Dengler, A. 4230, 4323
- history, Germany 5969
- Leibundgut, H. 38
- Long, G. S. 5968
- Loos, K. C. 6840
- Lyubimenko, V. N. 6839
- Prance, G., botany, books 7625
- Ressel, J. 2476
- Schenk, C. A. 6844
- Stifter, A. 4231

Biological control (*see also* Bacterial diseases; Insecticides, bacterial insecticides)
- *Acacia nilotica*, woody weeds, insects 7789
- *Alnus rubra*, weed control, Canada, *Chondrostereum purpureum* 3451
- by nematodes, insect pests, *Cephalcia arvensis*, *Picea abies*, Italy 5804
- Fabaceae, woody weeds, South Africa 8640
- fungal diseases
  - *Armillaria ostoyae*, *Pinus pinaster*, France 9127
  - *Botrytis cinerea*, *Picea mariana*, microorganisms 2256
  - *Cryphonectria parasitica*
    - *Castanea sativa*
      - Europe 7412
      - Italy, hypovirulence 9126
      - Slovakia 8321
  - *Cylindrocladium scoparium*, *Pinus resinosa*, seedlings 9124
  - forest trees, *Trichoderma harzianum*, enzymes 7409
  - *Fusarium solani*, *Pinus roxburghii* 2292
  - *Ophiostoma ulmi*, *Ulmus* 10023
  - *Robinia pseudoacacia*, forest nurseries, Russia 10020
- insect pests
  - *Achaea janata*, *Azadirachta indica*, India 9149
  - *Acizzia uncatoides*, ornamental woody plants, USA 7509
  - *Aphis*, ornamental woody plants, natural enemies 4899
  - *Atteva fabriciella*, *Ailanthus*, India 1485
  - *Choristoneura fumiferana*
    - *Abies balsamea*
      - bacterial insecticides 7507
      - Canada 676, 7503
    - conifers 675
    - *Picea mariana*, Canada 676
  - *Cinara cupressi*, conifers, Malawi 8350
  - *Cyclophragma yamadai*, *Quercus acutissima*, Japan, nuclear polyhedrosis viruses 6650
  - *Dendroctonus micans*, *Picea abies*, France, *Rhizophagus grandis* 9185
  - *Eucallipterus tiliae*, *Tilia*, USA 4898
  - forest nurseries 7501
  - forest trees
    - Developing Countries 5805
    - France 9184
    - India 5806
    - New Zealand, reviews 679
  - *Hypsipyla robusta*
    - *Swietenia macrophylla*, India 672
    - *Toona ciliata*, India 672
  - integrated pest management, reviews 7502
  - *Lymantria*, Belarus, parasitoids 10055
  - *Lymantria dispar*
    - by *Bacillus thuringiensis*, USA, reviews 5793

Biological control *cont.*
- insect pests *cont.*
  - *Lymantria dispar cont.*
    - *Populus*, foliage, chemistry 9192
    - *Quercus*
      - Canada 677
      - tannins 7508
      - USA 5786
    - *Quercus rubra*, USA 9162
  - *Monochamus alternatus*, *Pinus*, Japan, entomogenous fungi 2377
  - natural enemies, reviews, agroforestry, shelterbelts 9189
  - *Oxyops vitiosa*, *Melaleuca quinquenervia*, USA 6933
  - *Phoracantha semipunctata*, *Eucalyptus*, USA 7500
  - *Pissodes strobi*
    - *Picea*, North America 680
    - *Pinus*, North America 680
  - *Pityogenes chalcographus*, *Picea abies*, Germany 9171
  - *Podosesia aureocincta*, *Fraxinus pennsylvanica*, USA, entomophilic nematodes 4897
  - *Pyrrhalta luteola*, *Ulmus*, Australia 5788
  - *Rhyacionia frustrana*, *Pinus caribaea*, Cuba 1499-1500
  - *Synanthedon scitula*, *Cornus florida*, USA 2374
- *Mimosa invisa*, woody weeds, Papua New Guinea 1760
- parasitoids, insect pests, Lepidoptera 9193
- *Ulex europaeus*, woody weeds, New Zealand 8636
- weed control, *Mimosa pigra*, Australia, beneficial insects, *Mictis profana* 7797
- weeds, forest trees, New Zealand, reviews 679
- woody weeds
  - *Buddleja davidii*, New Zealand 5142
  - *Chondrostereum purpureum* 5144
  - *Cytisus scoparius*, New Zealand 8647
  - forest trees, New Zealand 5136
  - New Zealand, mycoherbicides 8637
  - *Prosopis*, USA, laboratory tests 167

Biomass
- *Abies lasiocarpa*, branches, growth rings, USA 2963
- *Acer saccharum*, acid deposition, climate, USA 5172
- *Arbutus unedo*, coppice, plant competition, Spain 3865
- bamboos, *Chusquea tessellata*, stand structure, Colombia 3080
- *Betula*, light, plant morphology, Finland 9667
- *Betula platyphylla*, crown, Japan, measurement 1843
- *Betula pubescens*, carbon dioxide enrichment 3537
- *Brachystegia spiciformis*, savanna woodlands, Zimbabwe, estimation 6960
- branchwood, Dipterocarpaceae, tropical forests, Peninsular Malaysia, estimation 8706
- broadleaves, plant colonization, Brazil, estimation 7823
- cerrado, forest fires, nutrients, Brazil 527
- *Chamaecyparis obtusa*, increment, respiration, Japan 8707
- coniferous forests
  - ground vegetation, Slovakia 9011
  - remote sensing, simulation, USA 1042
- conifers, ground vegetation, Slovakia 9946
- deciduous forests, carbon cycle, North America 3481
- distribution
  - *Fagus sylvatica*, Austria 227
  - *Pinus sylvestris*, forest plantations, site types, Russia 232
- energy, Brazil, wood properties 5047
- equations
  - *Acacia reficiens*, irrigated stands, Kenya 5960

Biomass *cont.*
- equations *cont.*
  - *Acacia zanzibarica,* irrigated stands, Kenya 5960
  - forest trees, savanna woodlands, Tanzania 6974
  - *Prosopis juliflora,* irrigated stands, Kenya 5960
- estimation
  - *Eucalyptus,* volume determination, India, equations 8503
  - *Pinus,* volume determination, India, equations 8503
- *Eucalyptus,* site factors, Australia, theory 3332
- for energy
  - forest resources, rural development, conferences 6790
  - research, Canada, bibliographies 8478
- forest trees
  - acid deposition, cycling, Japan, sulfur 6311
  - equations, allometry, USA 4195
  - improvement planting, Zaire, growth 6981
  - roots, Slovakia 6964
- *Julbernardia globiflora,* savanna woodlands, Zimbabwe, estimation 6960
- logging, forest ecology, Spain 2893
- *Lonicera,* light, habit 3550
- mangroves, roots, Cuba 7149
- nutrient reserves, wind damage, Puerto Rico 996
- *Picea abies,* roots, air pollution, Slovakia 7151
- *Picea mariana,* tree breeding, drought resistance, Canada 5477
- *Pinus contorta,* plant nutrition, soil chemistry, USA 9730
- *Pinus eldarica,* carbon dioxide enrichment, USA 3485
- *Pinus mugo,* synecology, Slovakia 7302
- *Pinus palustris,* forest plantations, USA, equations 6165
- *Pinus pinaster*
  - remote sensing, radar, stand characteristics, France 3516
  - stand development, natural thinning, simulation 6828
- *Pinus ponderosa,* carbon dioxide enrichment, photosynthesis, USA 1878
- *Pinus radiata*
  - cycling, Australia 6183
  - foliage, age, branches, New Zealand 3734
- *Pinus sylvestris,* remote sensing, radar, Finland 3517
- *Pinus taeda*
  - plant composition, USA 8708
  - remote sensing
    - radar, USA 6227
    - satellites, USA 2762
    - USA, soil water 1858
  - roots, USA, measurement 8501
- *Populus deltoides,* forest litter, nutrients, India 1942
- *Populus eugenei,* assimilation, nutrient allocation, carbon 3641
- *Pseudotsuga menziesii,* plant nutrition, stand development, France 7074
- *Quercus suber,* cork, forest litter, increment, Spain 1825
- rain forests
  - altitude, volcanoes, USA 3103
  - deforestation, Brazil 3736
- remote sensing
  - radar
    - Germany 3517
    - USA 1031
  - satellites, stand characteristics, India 2761
- riparian forests, Brazil 9919
- *Salix,* NPK fertilizers, plant nutrition, Finland 7756
- *Salix viminalis,* growth models, nitrogen, Sweden 4210
- sampling 9352
- savannas, remote sensing, Mali 3922
- secondary forests, stand structure, Brunei Darussalam, estimation 6939
- tropical forests, Brazil, uncertainty 9594

Biomass distribution
- *Eucalyptus pauciflora,* altitude, Australia 4484
- *Pinus ponderosa*
  - climate, USA, simulation 4406
  - genetic variation, drought resistance, plant morphology, USA 1889
- *Pinus sylvestris,* root shoot ratio, seasonal variation 5183
- *Pseudotsuga menziesii,* genetic variation, USA, increment 2182
- *Salix,* Sweden, estimation 6978
- *Swietenia macrophylla,* afforestation, stand establishment, Costa Rica, root systems 9530
- woody plants, maquis, France 2152

Biomass production
- *Acacia*
  - forest plantations, Congo, plant composition, major elements 6980
  - soil chemistry, plant composition, India 2699
- *Acer saccharinum,* coppice, plant water relations, USA 6096
- *Albizia lebbeck,* coppice, India 8620
- *Albizia stipulata,* agroforestry, cycling, India 8432
- *Alnus incana,* roots, growth, Sweden 6189
- *Arundinaria falcata,* secondary forests, cycling, India 3254
- *Atriplex halimus,* provenance, fodder, Mediterranean Region 1676
- bamboos
  - *Dendrocalamus strictus,* cycling, India 2701
  - *Gigantochloa scortechinii,* stand characteristics, Peninsular Malaysia 6962
  - *Phyllostachys bambusoides,* carbon cycle, Japan, simulation 4530
- *Bauhinia variegata,* Nepal, equations 6965
- *Betula,* boreal forests, thinning, Russia 9527
- *Betula pendula*
  - carbon dioxide enrichment, plant nutrition 7862
  - ozone, plant physiology, diurnal variation 6191
- broadleaves
  - foliage, plant water relations, India 8821
  - plant water relations, gas exchange, plant nutrition, Spain 3793
  - stand characteristics, stand structure, India 1410
- *Calliandra calothyrsus,* species trials, increment, Western Samoa 1668
- *Callitris columellaris,* forest plantations, understorey, soil properties, India 4334
- carbon dioxide enrichment, simulation, nutrient availability 1057
- *Castanea sativa,* coppice, France, equations 4398
- climatic change, simulation, nitrogen cycle 1834
- coniferous forests, climate, USA 1339
- *Cryptomeria japonica,* forest plantations, plant composition, India 3482
- cutting, *Leucaena,* variety trials, Brazil 7723
- cycling, roots, forest litter, estimation 321
- *Dacryodes excelsa,* wind damage, simulation, Puerto Rico 1071
- *Desmodium ovalifolium,* improved fallow, plant colonization, Peru 3266
- distribution, *Robinia pseudoacacia,* forest plantations, India 1837
- energy, broadleaves, conferences 4999
- equations
  - *Acacia mangium,* forest plantations, weight tables, Bangladesh 6975
  - *Leucaena leucocephala,* India 2499
- estimation, *Sesbania sesban,* Israel, equations 7670
- *Eucalyptus regnans,* thinning, light, Australia 8650

Biomass production *cont.*
- *Eucalyptus tereticornis*
  - forest plantations, plant nutrition, India 7973
  - spacing, increment, energy relations, India 2657
- *Ficus semicordata,* Nepal, equations 6965
- forest trees
  - cycling, India 3864
  - remote sensing 2705
  - vegetation types, stand characteristics, India 6540
- *Gliricidia sepium,* species trials, increment, Western Samoa 1668
- *Gmelina arborea,* forest plantations, increment, Ghana 5174
- *Inga edulis,* improved fallow, plant colonization, Peru 3266
- *Lantana camara,* scrub, cycling, India 3254
- *Larix sibirica,* clear felling, natural regeneration, Russia 9494
- *Leucaena,* variety trials, Venezuela, nutritive value 5061
- *Leucaena leucocephala,* farm forestry, Nepal, equations 6966
- *Lupinus arboreus,* agroforestry, nurse trees, defoliation, UK 3478
- management, boreal forests, stand characteristics, Canada, simulation 9596
- mangrove forests, forest litter, latitude, Tropics 3899
- *Medicago arborea,* provenance, fodder, Mediterranean Region 1676
- mortality, *Acer rubrum,* coppice, cutting date, Canada 923
- multipurpose trees
  - agroforestry, cycling, India 8432
  - fodder, contour cultivation, Sri Lanka 1799
  - India, equations 789
  - spacing, India 1779
- nitrogen fixing trees, short rotation forestry, India 1736
- nodulation, *Rhizobium, Leucaena leucocephala,* plant nutrition 7391
- nutrient reserves, Finland, carbon, nitrogen 7968
- *Picea*
  - biogeochemistry, plant nutrition, cycling, Russia 7970
  - boreal forests, thinning, Russia 9527
- *Pinus caribaea,* nutrient uptake, savannas, Nigeria 2704
- *Pinus pumila,* Japan 4400
- *Pinus* (Southern), geographical information systems, hydrology, USA 2506
- *Pinus sylvestris*
  - climate, simulation, Finland 3488
  - cycling, Finland 7960
  - forest litter
    - foliage
      - measurement
        - Europe 7902
        - Spain 7902
  - stand characteristics, ground vegetation, roots, Finland 7152
- *Pinus taeda,* air pollution, plant composition, USA 1158
- plantations, bamboos, *Bambusa arundinacea,* India 1804
- pods, *Prosopis juliflora,* irrigated stands, Kenya 6145
- *Populus*
  - carbon dioxide enrichment, photosynthesis, Belgium 8112
  - photosynthesis, France 4401
  - USA 1835
- *Populus canadensis*
  - air pollution, ozone 3654
  - forest plantations, increment, forest litter, Pakistan 9591
- *Populus deltoides,* spacing, cycling, India 1941
- *Prosopis,* progeny testing, species trials, USA 3137
- *Quercus,* soil texture, fine fraction, USA 1091
- *Quercus pyrenaica,* forest litter, stand density, climate, Spain 1824

- **Biomass production** *cont.*
  - remote sensing, satellites, vegetation types, simulation 3509
  - *Robinia pseudoacacia*
    - intensive silviculture
      - pulpwood production, Korea Republic 8710
      - stand density, Korea Republic 8709
  - *Salix*
    - fertilizers, sewage sludge, Canada 9459
    - NPK fertilizers, Finland 5106
    - plant nutrition, Finland 5184
    - short rotation forestry, USA 6029
    - tree breeding, short rotation forestry, Finland 5522
  - *Salix viminalis,* water use efficiency, seasonal variation, Sweden 3604
  - *Sapium sebiferum,* woody weeds, controlled burning, USA 2696
  - *Sesbania grandiflora,* species trials, increment, Western Samoa 1668
  - soil fertility, forest management 7924
  - stand characteristics, altitude, India 3052
  - *Taxodium distichum,* flooding, roots, shoots 312
  - *Vaccinium myrtillus,* browsing damage, Finland 966
  - variation, browse, phenology, foliage, Mali 7148
  - vegetation types, climate, remote sensing, USA 2691
  - water use efficiency, multipurpose trees, fuel plantations, irrigated stands, Kenya 6021
  - wetlands, soil water regimes, USA 6963
- **Biosynthesis,** *Ginkgo biloba,* lignin 3760
- **Biosystematics,** flora, Cameroon 5427
- **Biotechnology**
  - *Populus alba,* cell culture, methodology 9336
  - tree breeding
    - Developing Countries, reviews 5474
    - India 7336
- **Birds**
  - *Abies balsamea,* insect pests, Canada, ecology 7536
  - *Acer grandidentatum,* USA, ecology 690
  - *Aimophila aestivalis*
    - endangered species, forest management, USA 5817
    - forest fragmentation, USA, population ecology 9217
    - *Pinus taeda,* forest management, USA, simulation 6990
  - *Aix sponsa,* cavities in trees, USA, nesting 6686
  - *Anas,* USA, habitats 6682
  - *Bonasa bonasia, Corylus avellana,* Belgium, stand characteristics, habitats 10068
  - *Bonasa umbellus,* USA, food preferences, winter 9207
  - boreal forests
    - forest borders, clear felling, Sweden 5810
    - riparian forests, Canada, species diversity 10072
  - *Brachyramphus marmoratus,* North America, ecology, conservation 10066
  - *Calyptorhynchus funereus, Eucalyptus regnans,* forest management, Australia 4066
  - cavities in trees, forest management, reviews 1526
  - *Certhia familiaris,* boreal forests, fragmentation, ecology, Finland 1522
  - clear felling, *Abies balsamea,* Canada, buffer zones 4072
  - *Colinus virginianus,* USA, habitats 6671
  - *Columba leucocephala,* deciduous forests, fragmentation, USA 4059
  - *Columba palumbus,* farm woodlands, hedges, UK, control 1509
  - coniferous forests
    - Canada, surveys 9201
    - plant succession, Canada 4927
  - controlled burning, fire ecology, USA, mixed forests 6380
- **Birds** *cont.*
  - Corvidae, landscape, Sweden, behaviour, predation 694
  - dead trees
    - vegetation types
      - America 1515
      - USA, surveys 4902
  - deciduous forests, forest ecology, fragmentation, Canada 4916
  - *Dendrocopos leucotos,* mixed forests, national parks, Poland 4064
  - *Dendroica kirtlandii, Pinus banksiana,* forest fires, USA 3218
  - *Dryocopus martius,* coniferous forests, fragmentation, ecology, Sweden 1521
  - *Dryocopus pileatus,* feeding behaviour, dead trees, bottomland forests, USA 6680
  - ecology
    - *Acer pseudoplatanus,* agroforestry, sheep, UK 6725
    - clear felling, USA 3216
    - *Dacrydium cupressinum*
      - forest management
        - clear felling, New Zealand 1507
        - selective felling, New Zealand 1508
    - Dipterocarpaceae, understorey, Indonesia 6681
    - Europe 10077
    - forest plantations, riparian forests, South Africa 3210
    - hedges, land use, UK, species diversity 8369, 8372
    - insect pests, *Lymantria dispar,* USA 3179
    - *Larix eurolepis,* agroforestry, sheep, UK 6725
    - mountain forests, Spain 8371
    - scrub, Spain 8371
    - selective felling, statistical analysis 2502
    - swamps, understorey, Indonesia 6681
  - *Eucalyptus,* woodlands, honey bees, Australia 8356
  - *Falco columbarius,* forest influences, UK 5825
  - *Ficus luschnathiana,* seed dispersal, seed germination, Brazil 9881
  - foraging, *Formica aquilonia,* effects, *Picea abies,* Sweden 5828
  - forest ecology
    - logging, Australia 4062
    - USA, predators 3198
  - forest fragmentation, USA 9211
  - forest management, *Pinus echinata,* USA 4071
  - forest plantations, fragmentation, forest ecology, Netherlands 4067
  - forest trees, short rotation forestry, Germany 7540
  - forestry, land use, UK, species diversity 6689
  - *Garrulus glandarius, Quercus,* seed dispersal, Germany 1307
  - *Haliaeetus leucocephalus*
    - mangroves, USA, nesting 3197
    - USA, habitats 6685
  - herbicides, rights of way, woody weeds, USA 165
  - insect pests, *Quercus alba,* USA, growth 4908
  - insecticides
    - diflubenzuron, nontarget effects 673
    - malathion, Spain, effects 9197
  - *Lanius,* woody plants, Spain, ecology 8373
  - *Melanerpes,* feeding behaviour, dead trees, bottomland forests, USA 6680
  - mixed forests, USA, population dynamics 4924
  - nature conservation, history, Czech Republic 6840
  - nesting, habitats, *Quercus,* woodlands, USA 6679
  - *Nucifraga caryocatactes,* conifers, seed dispersal, Germany 1307
- **Birds** *cont.*
  - *Nucifraga columbiana, Pinus flexilis,* seed dispersal, population genetics, USA 3708
  - parasitism, clear felling, landscape, USA 6911
  - Passeriformes
    - bamboos, USA, habitats, bird control 6677
    - forests, fragmentation, Spain 4063
  - *Phillyrea latifolia,* seed dispersal, Spain 477
  - *Picea abies*
    - Belgium, ecology 4909
    - boreal forests, forest management, Sweden 10029
  - *Picoides,* boreal forests, Canada, feeding behaviour 7520
  - *Picoides borealis*
    - *Pinus,* USA, habitats 5179
    - *Pinus palustris,* cavities in trees, USA 4070
    - *Pinus* (Southern), USA, management 3209
    - stand structure, USA 8367
    - USA
      - management, population dynamics 9209
      - population change 9210
  - *Picoides pubescens,* feeding behaviour, dead trees, bottomland forests, USA 6680
  - *Pinus clausa,* forest fires, clear felling, USA 9213
  - *Pinus jeffreyi,* seed dispersal, USA 693
  - *Pionus maximiliani,* seed predation, Brazil 1518
  - plant succession, secondary forests, Costa Rica 4923
  - predation, forest borders, USA 9214
  - *Prunus mahaleb,* seed dispersal, Spain, ecology, species diversity 9204
  - *Pseudotsuga menziesii,* logging, USA, dead trees, ecology 2626
  - *Psittacula krameri,* broadleaved evergreen forests, nature reserves, India 696
  - *Quercus,* thinning, USA, ecology 1524
  - riparian forests
    - nature conservation, USA 4127
    - plant succession, France 5824
    - species diversity, France 9206
    - USA 4073
  - sclerophyllous forests, cavities in trees, Australia 6692
  - seasonal migration, rain forests, Mexico, habitat selection 9212
  - seed dispersal
    - mistletoes, Loranthaceae, forests, Colombia 1469
    - reviews 1307
    - tropical forests, reviews 3868
  - shifting cultivation, rain forests, Colombia 3222
  - silvicultural systems, *Eucalyptus,* Australia, logging effects 7532
  - *Sitta europaea,* deciduous forests, fragmentation, Belgium 7514
  - species diversity
    - Chile, rain forests, fragmentation 3219
    - clear felling, USA 1510
    - forest fragmentation, USA 10075
    - hedges, botanical composition, Italy 6702
    - *Populus fremontii,* riparian forests, USA 8362
    - *Populus tremuloides,* Canada 3217
    - *Tamarix chinensis,* riparian forests, USA 8362
    - virgin forests, agroforestry, Indonesia 7577
  - *Stenocereus griseus,* fruits, predation, Venezuela 6514
  - *Strix occidentalis*
    - conservation, forest economics, USA 732
    - USA, nesting, habitats 6684
  - *Strix occidentalis caurina,* nature conservation, forest economics, USA 5820

- **Birds** *cont.*
  - *Sula abbotti*, nature conservation, mined land, reclamation, Christmas Island 3234
  - *Tetrao parvirostris, Larix gmelinii*, Russia, feeding behaviour 8360
  - *Tetrao tetrix*, forest management, decision making, simulation 9200
  - *Tetrao urogallus*
    - boreal forests, Finland 4061
    - forest management, UK 4929
    - Germany, habitats 6688
    - Italy, ecology 698
    - *Pinus sylvestris*
      - foliage, browse, Norway 4056
      - UK 688
  - tropical forests, seed dispersal, Indonesia 1403
  - *Turdus, Juniperus thurifera*, seed dispersal, Spain 2387
  - vegetation types, forest ecology, Finland 4918
  - *Vireo atricapillus*, scrub, USA, habitats 4925
  - wildlife
    - cavities in trees
      - clear felling, Sweden 6690
      - statistical analysis, simulation 2509
    - conifers, New Zealand 6670
    - *Eucalyptus*, thinning, Australia 5822
    - forest management, multiple use, USA 8365
    - forest trees
      - herbicides, Canada 5829
      - Slovakia 10078
    - *Melaleuca quinquenervia*, Australia, urban areas 4052
    - Peru, habitats, feeding behaviour 6676
    - *Quercus pyrenaica*, Spain, feeding behaviour 8368
    - rights of way, USA 4922
    - riparian forests, reclamation, USA 4921
- ***Bischofia javanica***
  - agroforestry, biomass production, cycling, India 8432
  - foliage, chemistry, steroids 1237
  - wood chemistry
    - extractives, steroids 1237
    - Indonesia 6448
- ***Biscogniauxia nummularia***, fungal diseases, *Fagus sylvatica*, water stress, Italy 9104
- **Bison**, *Populus tremuloides*, geographical distribution, grazing, Canada 7268
- ***Bixa orellana***, seed germination, seed treatment, sowing 9425
- ***Blastophagus piniperda*** (*see Tomicus piniperda*)
- ***Blepharida***, insect pests, *Bursera schlechtendalii*, foliage, resin canals, pest resistance 5751
- ***Blepharocalyx salicifolius***, reproductive behaviour, Brazil 3027
- ***Blighia sapida***, rain forests, soil properties, Nigeria 7878
- ***Blumeodendron tokbrai***, wood anatomy 414
- **Bogs** (*see also* Vegetation types, bogs)
- ***Boletus***, mycorrhizas, Dipterocarpaceae, nutrient uptake, seedlings 1448
- **Bolivia**
  - agroforestry, choice of species, books 9
  - deforestation, land clearance, soil properties 8006
  - forestry, women 815
  - *Polylepis*, mountain forests 9920
  - savannas, deforestation 5000
  - *Talauma boliviana*, taxonomy 4739
  - tropical forests, hunting, forest management 5813
  - vegetation types
    - nature conservation, national parks 5898
    - synecology, degraded forests 9932
- ***Bombacopsis quinata***
  - clones, shoot cuttings, management, Colombia 1705
  - forest nurseries, management, Colombia 1731
- ***Bombacopsis quinata*** *cont.*
  - grafting, Colombia 879
  - growth models
    - Costa Rica 218
    - Panama 218
  - seed orchards
    - management, Colombia 2200
    - pollination, Colombia 1685
  - shoot cuttings
    - Colombia 879
    - growing media, Colombia 1706
- ***Bombax ceiba*** (*see Bombax malabaricum*)
- ***Bombax insigne***, wood anatomy 401
- ***Bombax malabaricum***
  - agroforestry
    - biomass production, cycling, India 8432
    - increment, India 4110
  - foliage, chemistry, Australia 7081
  - forest litter, measurement, decomposition, India 3586
  - natural regeneration, rain forests, ecotones, Australia 3935
  - seedling growth, photosynthesis, foliage, India 1261
  - wood anatomy 401
- ***Bonasa bonasia***, birds, *Corylus avellana*, Belgium, stand characteristics, habitats 10068
- ***Bonasa umbellus***, birds, USA, food preferences, winter 9207
- **Books**
  - A key to eucalypts in China 7619
  - A passion for plants: from the rainforests of Brazil to Kew Gardens. The life and vision of Ghillean Prance 7625
  - Agroforestry 8471
  - Agroforestry for increased productivity, sustainability and poverty alleviation 8474
  - Air pollutants and the leaf cuticle 2450
  - American red oak 4153
  - An African savanna: synthesis of the Nylsvley study 4997
  - Anglicko-slovenský a slovensko-anglický lesnícky a drevársky slovník 7636
  - Application of economic techniques in environmental impact assessment 728
  - Arbres et arbustes guérisseurs des savanes maliennes 3299
  - Aridity: a constraint on development 1868
  - Atalante fotografico di funghi ipogei 8468
  - Australian tropical rain forest trees 6769
  - Australian vegetation 2451
  - Balancing act: environmental issues in forestry 5930
  - Bamboos 2452
  - Bibliography of systematic wood anatomy of Dicotyledons 762
  - Biogeochemistry of small catchments, a tool for environmental research 1950-1951
  - Biogeography and ecology of Turkmenistan 5919
  - Biological diversity: the coexistence of species on changing landscapes 11
  - Biology and management of red alder 6784
  - Biology of adventitious root formation 3403
  - Biotechnology in agriculture and forestry 28. Medicinal and aromatic plants VII 749
  - Brazilian forest tree species 9319
  - Building on indigenous natural resource management: forestry practices in Zimbabwe's communal lands 7627
  - California forests and woodlands: a natural history 6785
  - *Camptotheca acuminata* Decaisne, Xi Shu (Chinese Happytree): a promising anti-tumor and anti-viral tree for the 21st century 7618
  - Casuarinas: trees of multiple utility 2448
  - Causes of tropical deforestation: the economic and statistical analysis of factors giving rise to the loss of the tropical forests 2449
- **Books** *cont.*
  - *Cedrus deodara*, India 2454
  - Changing tropical forests: historical perspectives and today's challenges in Central & South America 4150
  - Checklist of woody perennial plants of Sri Lanka 3300
  - Chinese-English manual of commonly-used preparations in traditional Chinese medicine 5931
  - Chorology of trees and shrubs in Greece 753
  - Clearcut: the tragedy of industrial forestry 5923
  - Climate change: the UK programme 267
  - Colour atlas of traditional Chinese medicines with text on techniques of their cultivation 1601
  - Conservation genetics 5480
  - Conspiracy of optimism: management of the National Forests since World War Two 5927
  - Contested domains: the state, peasants and forests in contemporary India 1
  - Crop structure and light microclimate: characterization and applications 5223
  - Diagnosis of ill-health in trees 6
  - Dictionary of Medicinal Plants. Medicinal properties, prescription and self-medication 2445
  - Dipterocarpaceae: mycorrhizae and regeneration 755
  - Dryland forestry: planning and management 4149
  - Ecología de un bosque tropical: ciclos estacionales y cambios a largo plazo 5932
  - Ecological and social problems of agroforestry 2455
  - Ecology and control of the forest insects of India and the neighbouring countries 5
  - Ecology of a tropical forest: seasonal rhythms and long-term changes 5932
  - Ecology of fire 9318
  - Ecology of woodland creation 6776
  - Economic policies for sustainable development 8475, 8551, 9262
  - Effects of acid rain on forest processes 1593
  - Ekonomika a řízení lesního hospodářství 10
  - Élagage et taille de formation des arbres forestiers 4152
  - English-Slovak and Slovak-English forestry and wood technology dictionary 7636
  - Environmental change in drylands: biogeography and geomorphological perspectives 2401
  - Environmental constraints on the structure and productivity of pine forest ecosystems 6797
  - Espécies florestais brasileiras 9319
  - Ethnobotany and the search for new drugs 748
  - Ethnobotany in India 747
  - Everglades handbook: understanding the ecosystem 1594
  - Fiber atlas: identification of papermaking fibers 5920
  - Field guide to western trees: western United States and Canada 7622
  - Flora of Ethiopia, Volume 3: Pittosporaceae to Araliaceae 1596
  - Flora of North America north of Mexico 5928-5929
  - Flora of Somalia 758
  - Flora of Victoria 3296
  - Flowering plants of Seychelles 757
  - Forest and woodland trees in Britain 6786
  - Forest arboretum in the dry zone 7611
  - Forest management planning: sustainable regulation of forests 4164
  - Forest mensuration 3298
  - Forest pests in Central America: field guide 4147

Books *cont.*
- Forest pests in Central America: handbook 4146
- Forest resources in Europe 1950-1990 9320
- Forestry economics and management 10
- Forestry for arid regions 7
- Forestry research education in India 7624
- Forests, gardens, parks and urban environment 6775
- Forsteinrichtung: nachhaltige Regelung des Waldes 4164
- Fragile tropics of Latin America: sustainable management of changing environments 7632
- From the forest to the sea: the ecology of wood in streams, rivers, estuaries and oceans 4156
- Graines des feuillus forestiers: de la récolte au semis 4151
- Growth and CO_2 exchange in forest trees 3297
- Guía para uso de arboles en sistemas agroforestales para Santa Cruz, Bolivia 9
- Guide illustre de la taille et de la greffe 5917
- Guide to palms & cycads of the world 744
- Guide to the use of trees in agroforestry systems in Santa Cruz, Bolivia 9
- *Hamamelis* and other witch hazels 3294
- *Hamamelis* und anders Zaubernussgewachse 3294
- Handbook of agroforestry 750
- Handbook of Arabian medicinal plants 3295
- Herbalism course. Phytotherapy 2444
- High frontier: exploring the tropical rainforest canopy 3
- Himalayan eco-system 2453
- History of the Australian vegetation: Cretaceous to recent 6770
- Home-grown energy from short-rotation coppice 7623
- Human medicinal agents from plants 746
- Illustrated guide to pruning and grafting 5917
- In harmony with nature 752
- Indian forestry through the ages 4155
- India's forests, forestry and wildlife 4154
- Interacting stresses on plants in a changing climate 1597, 1893, 1968, 1970-1971, 2082-2083
- Introduction to forest and renewable resources 6777
- Issues in social forestry: a view at grass root level 730
- Kurs Naturheilverfahren. Phytotherapie 2444
- L' aridité: une contrainte au developpement 1868
- La mesure des arbres et des peuplements forestiers 3298
- Land use and the causes of global warming 8
- Landscape forestry 8470
- Le chêne rouge d'Amérique 4153
- Les chênes pédonculé et sessile en France et en Belgique: ecologie, economie, histoire, sylviculture 4159
- Long-term experiments with acid rain in Norwegian forest ecosystems 754
- Managing vertebrate pests: rabbits 6787
- Manual de sanidade dos viveiros florestais 4160
- Manual of forest nursery hygiene 4160
- Martens, sables, and fishers: biology and conservation 6783
- Masters of survival 2410
- Measuring and monitoring biodiversity in tropical and temperate forests 8473
- Medicinal trees and shrubs of the Malian savanna 3299
- Mires and man 6781
- Modelling forest growth and yield: applications to mixed tropical forests 1595

Books *cont.*
- Money trees on your property: profit gained through trees and how to grow them 4158
- Monograph on chir pine (*Pinus roxburghii* Sarg.) 751
- Monograph on deodar (*Cedrus deodara*) 2454
- Monograph on khair (*Acacia catechu* Willd.) 6771
- Monograph on sal (*Shorea robusta* Gaertn. F.) 6772
- Multipurpose trees for agroforestry and wasteland utilisation 6773
- Natural management of woods: continuous cover forestry 6778
- Nature and dynamics of forest-savanna boundaries 4165
- Nitrate: processes, patterns and management 1953
- Nursery sector: from production to planting 4144
- Nutrient disorders in plantation eucalypts 6780
- Palms in forest ecosystems of Amazonia 7620
- Peatland forestry: ecology and principles 8469
- Pedunculate and sessile oaks in France and Belgium 4159
- Pests of landscape trees and shrubs: an integrated pest management guide 6788
- Photographic atlas of hypogeous fungi 8468
- Plant cell and tissue culture 6789
- Plant resources of South-East Asia No. 5 (1) Timber trees: major commercial timbers 756
- Planting design handbook 6752
- Plants of Guinea used by farmers and veterinarians 2446
- Plants of Western New South Wales 12
- Pollen of wet evergreen forests of the Western Ghats, India 3293
- Preparing to plant tropical trees 5933
- Progress in botany: structural botany, physiology, genetics, taxonomy, geobotany 4537
- Protected area economics and policy: linking conservation and sustainable devlopment 7803
- Pruning and training of forest trees 4152
- Pruning of single trees. 2. Ornamental trees and shrubs 10154
- Rainforest remedies. One hundred healing herbs of Belize 745
- Rainforest trees of mainland south-eastern Australia 4996
- Regional silviculture of the United States 3301
- Remote sensing and GIS in ecosystem management 6774
- Saving nature's legacy: protecting and restoring biodiversity 7631
- Seeds of forest trees: from collection to seedlings 4151
- Selection and management of nitrogen-fixing trees 3302
- Selenium in the environment 10112
- Soil conservation and silviculture 5926
- Somatic embryogenesis in woody plants. Volume 1: history, molecular and biochemical aspects, and applications 6782
- Stable isotopes and plant carbon-water relations 2834-2837, 2998-3002
- Standörtlich-naturräumliche Grundlagen ökologiegerechter Forstwirtschaft 4162
- State of the environment atlas 7629
- Strassen statt Wiesen und Wälder? 4161
- Study on forest inventory and monitoring based on space-borne remote sensing data 6768
- Sustainable forestry: philosophy, science, and economics 4157
- Systematics and conservation evaluation 5921
- Systems studies in agriculture and rural development 7621

Books *cont.*
- Taille des arbres libres. 2. Arbres et arbustes d'ornement 10154
- Techniques and methods of ethnobotany: as an aid to the study, evaluation, conservation and sustainable use of biodiversity. 5918
- The application of economic techniques in environmental impact assessment 46
- The common ground of wild and cultivated plants: introductions, invasions, control and conservation 6148, 6758
- The new forester 5925
- Tree diseases and disorders: causes, biology, and control in forest and amenity trees 8467
- Tree diseases of Eastern Canada 7633
- Tree management in farmer strategies: responses to agricultural intensification 4166
- Trees and tree farming 3303
- Trees of the Balikpapan-Samarinda Area, East Kalimantan, Indonesia: a manual to 280 selected species 4163
- Trees on marginal lands: afforestation techniques and systems 4
- Tropical ecosystems: a synthesis of tropical ecology and conservation 7626
- Tropical montane cloud forests 4148
- Urban forest landscapes: integrating multidisciplinary perspectives 8472
- Urban landscape management 4145
- Vascular cambium: development and structure 5924
- Vascular plants of Djibouti: illustrated flora 1598-1600
- Vegetation science in forestry: global perspective based on forest ecosystems of East and Southeast Asia 5922
- With broadax and firebrand: the destruction of the Brazilian Atlantic forest 6779
- Women's voices from the rainforest 7630
- Woodfuel energy supply to rural India 7628
- Woodlands to visit in England and Wales 1995 8449
- Woody plants in agro-ecosystems of semi-arid regions: with an emphasis on the Sahelian countries 8466

Borneo
- *Jasminum*, taxonomy 7232
- *Melicope*, taxonomy 7231
- *Pittosporum*, taxonomy 7230
- *Turpinia*, taxonomy 7228

Boronia megastigma, essential oils, New Zealand 1806

Bosea
- geographical distribution
  - Asia 7262
  - Europe 7262

Bosnia-Hercegovina, *Pinus heldreichii*, essential oils 8917

Bossiaea ornata, seed germination, temperature 76

Boswellia papyrifera, in vitro culture, development projects, Djibouti 9444

Boswellia serrata
- deciduous forests, synecology, remote sensing, India 9638
- soil chemistry, nitrogen, roots, India 5303

Botanical gardens
- Czech Republic 2439
- India, bibliographies, books 6775

Botany
- *Apodytes*, taxonomy, new species, South Africa 3849
- biographies, Prance, G., books 7625
- *Erythrina*, agroforestry, nitrogen fixation, research, conferences 3309
- *Quercus rubramenta*, taxonomy, Mexico 1323
- *Taxus baccata*, genetic resources, ornamental woody plants, reviews 1202
- *Tetrameles nudiflora*, Thailand 3863

Botryodiplodia theobromae
  fungal diseases
    conifers
      seeds
        reviews 603
        South Africa 603
    Pinus caribaea, Venezuela, blue stain 2285
    Pinus elliottii, seeds, USA 4016
  Platanus occidentalis, foliage, infection 5651
Botryosphaeria dothidea, fungal diseases, *Sequoiadendron giganteum,* France 1460
Botryosphaeria ribis, fungal diseases, *Juglans,* Italy 2273
Botrytis cinerea
  fungal diseases
    Eucalyptus, India 8293
    Eucalyptus globulus, plant physiology 3771
    Picea mariana
      biological control, microorganisms 2256
      seedlings, infection, microclimate 1449
      stress, disease resistance, control 1450
Bourreria cumanensis, plant water relations, drought resistance, Venezuela 3594
Brabejum stellatifolium, reproductive behaviour 2101
Brachonyx pineti, insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
Brachychiton australis, insect pests, *Lygropia clytusalis,* Australia 2327
Brachychiton rupestris, insect pests, *Lygropia clytusalis,* Australia 2327
Brachyderes incanus, insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
Brachyglottis bidwillii, frost resistance, plant succession, New Zealand 281
Brachylaena huillensis
  increment, diameter, Kenya, age 998
  phenology, reproductive behaviour, Kenya 3833
Brachynema axillare, taxonomy, South America 9902
Brachyramphus marmoratus, birds, North America, ecology, conservation 10066
Brachystegia boehmii
  insect pests, Saturniidae, forest fires, Malawi 7452
  savanna woodlands, phenology, plant nutrition, Zambia 6308
Brachystegia manga, savanna woodlands, natural regeneration, soil chemistry, Zambia, charcoal 5239
Brachystegia spiciformis
  plant competition, savanna woodlands, Zimbabwe 4802
  savanna woodlands
    biomass, Zimbabwe, estimation 6960
    soil organic matter, Zimbabwe, forest litter, soil fertility 2812
    stand structure, disturbance, soil properties, Zimbabwe 8156
  woodlands, ecology, Zimbabwe, bibliographies 7634
Bradyrhizobium
  Acacia mangium, nitrogen fixation, plant physiology 598
  bacteria, Fabaceae, tropical forests, Brazil 9071
  root nodules
    Acacia
      inoculation 2236
      taxonomy, research 7389
    Acacia ampliceps, salt tolerance, seedling growth, nitrogen fixation 6620
    Acacia auriculiformis, IAA 5589
    Acacia mangium
      morphology, soil chemistry 6612
      soil properties, Côte d'Ivoire, growth 9069
    Chamaecytisus palmensis, Australia 2241
    Fabaceae, taxonomy, Brazil 9070
    Faidherbia albida, Senegal 8266
Bradyrhizobium *cont.*
  root nodules *cont.*
    Maackia amurensis, seedling growth 6608
  symbiosis, *Faidherbia albida,* Senegal, theses 5667
Bradyrhizobium japonicum, symbiosis, multipurpose trees, seedling growth, nitrogen fixation 3151
Branches
  Abies lasiocarpa, growth rings, biomass, USA 2963
  chemistry, *Populus* 'Robusta', frost resistance, seasonal variation 2987
  conifers
    light, interception, USA 3733
    optical properties 1059
    pruning, seed orchards, reviews 9528
    wood strength, Japan, testing 4632
  endophytes
    Albosynnema elegans, Poulsenia armata, Costa Rica 9067
    Solheimia costaspora, Inga goldmanii, Costa Rica 9067
  forest trees, foliage, habit, New Zealand 4620
  Fraxinus excelsior, crown, France 6186
  Picea abies, Poland, oils, production 7171
  Pinus radiata, foliage, age, biomass, New Zealand 3734
  Pinus sylvestris
    defoliation, foliage, increment, Finland 8892
    evapotranspiration
      stand density
        Europe 7146
        Russia 7146
  Pinus taeda, crown, simulation, USA 6187
  Pseudotsuga menziesii
    forest litter, stand density, USA 4500
    genetic variation, USA, increment 2183
    maturation, ontogeny, measurement 4652
  Robinia pseudoacacia, seedlings, photosynthesis, defoliation, shading 2076
  woody plants, foliage, habit, New Zealand 4620
Branching
  Abies sachalinensis, computer techniques 1624
  multipurpose trees, habit, India 2037
  patterns, forest trees, reviews, theory 8044
  Quercus petraea, shoot cuttings, selection criteria, plant morphology 5374
Brashing (*see* Pruning)
Brasilianus lacordairei, insect pests, Argentina 2301
Brassaiopsis glomerulata, vegetative propagation, indigenous knowledge, Nepal 6883
Brassaiopsis hainla
  fodder, choice of species, Nepal 6948
  vegetative propagation, indigenous knowledge, Nepal 6883
Brassolis sophorae, insect pests, Arecaceae, Venezuela 5732
Brazil
  bacteria, soil bacteria, Fabaceae, tropical forests 9071
  bamboos
    Merostachys, taxonomy 6519
    reviews 7223
  biomass, energy, wood properties 5047
  caatinga, botanical composition 3900
  Caryocar brasiliense, cerrado, edible species, reviews 8038
  Cecropia glazioui, wood anatomy, pollution 6325
  cerrado, forest fires, biomass, nutrients 527
  deforestation
    water quality, streams, soil water, simulation 8419
    wildlife, simulation 4955
  Enterolobium contortisiliquum, seeds, seed treatment, dormancy breaking 8574
Brazil *cont.*
  Eugenia, foliage, anatomy, keys 2038
  forest trees
    forest plantations, development 49
    reviews 9319
  insect pests
    Atta sexdens rubropilosa, broadleaves 7489
    forest trees 5683
    Lepidoptera, *Eucalyptus* 5713
  medicinal plants, ethnobotany 6153
  Myrtaceae, reproductive behaviour 3027
  nature reserves, design 8441
  Phoeba porosa, wood chemistry, essential oils 9801
  rain forests, land use, sustainability, biodiversity 3352
  remote sensing, multispectral imagery, vegetation, land use, change 9630
  root nodules
    Bradyrhizobium, Fabaceae, taxonomy 9070
    Rhizobium, Fabaceae, taxonomy 9070
  Sapindus saponaria, fruits, medicinal plants, saponins 9798
  tropical forests
    deforestation, history, books 6779
    pollination, Apidae, conservation 6643
  vegetation types
    land use
      carbon balance, estimation 9734
      carbon cycle, estimation 9735
  Acre
    Froesia diffusa, taxonomy 491
    Iriartea deltoidea, stand characteristics, stability, harvesting 1405
    Protium tenuifolium, wood chemistry, lignans 9819
  Amazonas
    Arecaceae, synecology, fruiting 3060
    Astrocaryum jauari, flooding tolerance, plant physiology 1113
    bottomland forests
      fishes 9233
      seed dispersal 3035
    canopy gaps, thematic mapper, wind damage 3566
    Clusia nemorosa, flowers, Apidae, behaviour 9883
    deforestation, land use, sustainability 720
    Eschweilera albiflora, natural regeneration, seed predation, seed dispersal 3115
    Eucalyptus urograndis, pulpwood production, harvesting, nutrients 9723
    forest ecology, forest borders, understorey, simulation 4748
    forestry, nature conservation, biodiversity 6838
    insects
      Euglossa, deforestation, ecology 619
      Pseudomyrmex concolor, Tachigali myrmecophila, mutualism 2296
    monkeys, *Cebus apella, Cariniana micrantha,* seed predation 474
    Paullinia cupana, genetic variation, plant morphology 587
    primates, feeding behaviour, phenology 3220
    rain forests
      biomass, deforestation 3736
      clearing, forest fires, carbon dioxide enrichment 9776
      forest influences, soil water balance 8871
      leaf area index, deforestation 3736
      nature reserves, fragmentation, plant physiology 3790
    remote sensing
      multispectral imagery, land use, change 7843
      plant physiology, canopy 1032
    riparian forests, forest litter, sediment 1100

Brazil *cont.*
- Amazonas *cont.*
  - *Sterigmapetalum plumbeum,* taxonomy 9901
  - tropical forests
    - evapotranspiration, transpiration, estimation 8378
    - remote sensing, classification 6225
- Bahia
  - *Parapiptadenia ilheusana,* taxonomy, new species 8960
  - *Peltogyne chrysopis,* taxonomy 4740
  - *Stephanopodium magnifolium,* taxonomy, new species 8962
- Brasilia, *Acrocomia aculeata,* flowering, fruiting 9880
- Espírito Santo, *Trema micrantha* 9898
- Goiás
  - riparian forests
    - biomass 9919
    - species diversity, stand structure, natural regeneration 8177
    - synecology, botanical composition 6538
- Maranhão, *Orbignya phalerata,* fruits, rural economy 7799
- Mato Grosso
  - broadleaves, biomass, plant colonization, estimation 7823
  - cerrado, synecology, phenology 8995
  - insect pests, Lepidoptera, *Eucalyptus* 3181
  - remote sensing, video recordings, vegetation types 1860
- Minas Gerais
  - *Araucaria angustifolia,* pollen analysis, geographical distribution, climate 2129
  - cerrado, flora, utilization, land use 2147
  - *Eucalyptus citriodora,* agroforestry, weed control, livestock 6723
  - *Eucalyptus saligna,* wood density, equations, age 9583
  - insect pests
    - Lepidoptera, *Eucalyptus urophylla,* population dynamics 5729
    - *Tabebuia ochracea,* damage, foliage 3176
  - primates, forest fragmentation, conservation 9295
  - tropical forests, synecology, flooding 1367
  - wildlife, *Eucalyptus saligna,* forest plantations, understorey 7515
- Pará
  - *Bertholletia excelsa,* age of trees 4380
  - bottomland forests, forest management, non-wood forest products 5188
  - broadleaves, plant water relations, canopy gaps, plant succession 6576
  - insect pests, Lepidoptera, *Eucalyptus urophylla,* control 5802
  - multipurpose trees, agroforestry 2422
  - rain forests, remote sensing, image processing 2767
  - tropical forests
    - increment, logging, regrowth 6180
    - natural regeneration, forest fires 377
    - root systems, carbon cycle, plant water relations 4085
  - *Virola surinamensis,* forest ecology, logging, damage 1173
- Pernambuco
  - caatinga
    - controlled burning, biogeochemistry, nutrients 2922
    - natural regeneration, burning 1559
- Rio de Janeiro
  - flora, nature reserves 9907
  - mangroves, soil chemistry 1092
  - *Naucleopsis,* nomenclature, taxonomy 9895
  - *Trichilia luciae,* taxonomy 9894

Brazil *cont.*
- Rio Grande do Sul
  - insect pests, *Sirex noctilio, Pinus taeda,* parasitoids 2364
  - *Leucaena leucocephala × Leucaena diversifolia,* plant morphology 8074
  - Meliaceae, flora 7245
- Rondônia
  - nitrogen cycle, land use 8826
  - tropical forests, biomass, uncertainty 9594
- Roraima
  - rain forests
    - forest ecology 524
    - forest litter, cycling 296
- Santa Catarina
  - *Araucaria angustifolia,* pollen analysis, geographical distribution, climate 2129
  - *Leucaena,* fodder, variety trials 8568
- São Paulo
  - birds, *Pionus maximiliani,* seed predation 1518
  - *Eucalyptus,* silvicultural systems, forest economics, returns 5217
  - *Ficus luschnathiana*
    - seed dispersal
      - seed germination
        - bats 9881
        - birds 9881
  - forest influences, hydrology, watersheds, research projects 9237
  - forest inventories 2750
  - insect pests, *Thyrinteina arnobia, Eucalyptus citriodora* 2326
  - *Leucaena,* variety trials, biomass production, cutting 7723
  - small mammals, rain forests, population ecology 9215
  - squirrels, *Sciurus ingrami,* seed predation 10067

Bridelia ferruginea, population dynamics, savannas, Côte d'Ivoire, simulation 2511

Broadleaves
- acid deposition
  - cycling
    - biomass, Japan, sulfur 6311
    - Japan, sulfur 6312
- agroforestry, soil water, microclimate, Canada 9278
- bark, chemistry, air pollution, Netherlands, trace elements 3749
- cleaning, North America 162
- clear felling, natural regeneration, species diversity, USA 3121
- coppice
  - silvicultural conversion
    - Greece, geographical distribution, management 8618
    - plant physiology, Italy 8935
  - stand structure, snow damage, Japan 6267
- deer
  - *Capreolus capreolus,* browsing damage, France 1512
  - *Cervus unicolor,* drought, India, damage 2844
- dendrochronology, Japan, history 4139
- diameter, equipment, lasers, measurement 4448
- drought, India, mortality 2844
- flowers, development, reviews 2050
- foliage
  - colour, Japan, seasonal behaviour 8045
  - morphology, plant physiology, USA 4692
  - phenols, plant nutrition 2994
- forest decline, France 1297
- forest influences
  - soil chemistry, Belgium, site factors, classification 8999
  - streams, Japan, chemistry 4599
- forest litter
  - aspect, soil chemistry, Australia 2817
  - decomposition, vegetation types, Canada 4493
  - evaporation, Japan, simulation 4491

Broadleaves *cont.*
- forest litter *cont.*
  - soil organic matter, carbon cycle, France, measurement 5240
- forest management, Italy 7833
- forest plantations, Australia, research 3353
- fungal diseases, *Daedaleopsis flavida,* tropical forests, India 6627
- genetic resources, species trials, Arid Regions, conservation 1436
- insect pests
  - *Caloptilia,* Europe, taxonomy 9154
  - *Lymantria dispar,* USA, biological control 5796
  - *Polygonia c-album*
    - biology 648
    - host specificity 648
- liberation felling, mixed forests, USA, insect pests, *Pissodes strobi* 924
- mycorrhizas, nitrogen fixation, vegetation types 6618
- natural regeneration
  - seed germination, viability, UK 4750
  - selection forests, France, canopy gaps 5124
  - silvicultural conversion, Germany 9493
  - vs. artificial regeneration, UK, history 2625
- phenology
  - history, UK 6393
  - prediction, simulation, USA 387
- photosynthesis, light penetration, seedlings, morphology, Panama 3792
- reaction wood, fibres, growth stress 4585
- reclamation, mined land, USA, establishment 4090
- root nodules, *Frankia,* reviews 1447
- seedlings, nutrient uptake, USA, canopy gaps 1144
- seeds, books 4151
- selection system, Canada 2629
- shelterwood system, natural regeneration, USA 146
- silviculture, natural regeneration 8622
- spoil banks, natural regeneration, plant succession, Japan 1741
- stems, mechanics, wind, Japan 1221
- street trees, climate, USA, stress, tolerance 4985
- thinning, North America 162
- volume determination, roundwood, Malawi 2689
- water use, clay soils, buildings, databases, UK 10146
- weed control, power lines, USA 4344
- woody plants, foliage, toughness 1230

Bromus tectorum
- rangelands, weed control, physical control, USA 5147
- weed control 5146

Brosimum alicastrum
- foliage, anatomy, light intensity, photosynthesis 3731
- liberation felling, Mexico, girdling, poisoning 2648
- rain forests, Mexico, wood anatomy 1211
- seed collection, planting stock, establishment, Jamaica 2621
- synecology, species diversity, recruitment, seed predation, Mexico 1406

Broussonetia papyrifera, girdling, enzymes, cytology 6401

Browse
- *Acacia berlandieri,* foliage, chemistry, USA 9823
- agroforestry, goats, Greece 4117
- birds, *Tetrao urogallus, Pinus sylvestris,* foliage, Norway 4056
- broadleaves, Mediterranean Region, phenolic compounds, techniques 437
- choice of species, indigenous knowledge, plant composition, Kenya 6669
- deer
  - *Alces alces, Pinus sylvestris,* Sweden 10069
  - *Cervus,* broadleaves, New Zealand 9226
  - *Odocoileus hemionus,* Canada 1505

- **Browse** *cont.*
  - deer *cont.*
    - *Odocoileus virginianus*
      - forest trees, USA 3196
      - plant succession, USA 5827
      - USA 10059
  - digestibility, Costa Rica 970
  - goats, *Capra pyrenaica,* Spain 10058
  - *Lonicera japonica,* USA, fertilizers 4053
  - management, deer, *Odocoileus virginianus,* USA 3201
  - phenology, foliage, biomass production, variation, Mali 7148
  - wildlife
    - *Alces alces*
      - boreal forests, USA 3214
      - broadleaves, forests, Poland 7534-7535
- **Browse plants**
  - Burundi, surveys 8680
  - multipurpose trees, insect pests, Nigeria 8325
  - Rwanda, surveys 8680
  - Zaire, surveys 8680
- **Browsing**
  - deer
    - *Alces alces*
      - *Pinus sylvestris,* Sweden, simulation 10071
      - reviews, ecology 7523
    - *Cervus elaphus, Nothofagus solandri,* New Zealand 4051
- **Browsing damage**
  - broadleaves, seedling growth, light, USA 1520
  - deer
    - *Alces alces, Pinus sylvestris,* Finland 7519
    - *Capreolus capreolus*
      - *Abies alba,* natural regeneration, France 1740
      - broadleaves, France 1512
    - *Cervus elaphus*
      - *Abies alba,* natural regeneration, France 1740
      - sclerophyllous scrub, Corsica 7525
    - protection forests, forest economics, Germany 7533
    - *Salix,* USA 5826
  - elephants, *Loxodonta africana, Adansonia digitata,* Tanzania, simulation 4048
  - *Eucalyptus*
    - agroforestry, sheep, Australia 9270
    - Australia, productivity 8711
  - mammals, *Lepus americanus,* broadleaves, USA 4919
  - marsupials, *Wallabia bicolor,* forest trees, seedlings 5823
  - *Picea glauca,* repellents, Canada, selenium 4905
  - *Prunus pensylvanica,* seedling growth, plant competition, USA 3878
  - resistance, *Acacia,* foliage, plant morphology, South Africa 5808
  - *Vaccinium myrtillus,* biomass production, Finland 966
  - wildlife
    - *Chamaecyparis obtusa,* Japan, fences, control 7529
    - *Rhinoceros unicornis,* riparian forests, Nepal 692
    - riparian forests, USA 7543
- **Bruchidae,** insect pests, *Acacia,* seeds, seed germination, establishment 6657
- ***Bruchidius andrewesi***
  - insect pests
    - *Acacia tortilis*
      - India
        - fruits 5734
        - seeds 5734
- ***Bruchophagus sophorae,*** insect pests, *Sophora japonica,* seeds, Slovakia, damage 838
- ***Bruguiera,*** mangrove forests, increment, diameter, natural regeneration, Bangladesh 6177
- ***Bruguiera cylindrica,*** mangroves, foliage, pigments, seasonal variation, India 4675
- ***Bruguiera gymnorrhiza***
  - afforestation, erosion control, India 3225
  - crabs, *Sesarma meinerti,* forest litter, degradation, South Africa 1523
  - fisheries, Sri Lanka 9232
  - foliage, light, Australia, phenolic compounds 434
  - forest litter, measurement, mangrove forests, India 297
  - mangrove forests, remote sensing, synecology, India 6996
  - mangroves, foliage, Kenya, chemistry 4676
  - wood properties, Vietnam 4641
- ***Bruguiera hainesii,*** pollination, Peninsular Malaysia, birds 1315
- ***Bruguiera parviflora,*** foliage, light, Australia, phenolic compounds 434
- ***Bruguiera sexangula,*** natural regeneration, crabs, Bangladesh 7257
- ***Brunchorstia pinea*** (*see Gremmeniella abietina)*
- **Brunei Darussalam**
  - *Agathis borneensis*
    - genetic variation, population genetics 7354
    - tissue culture 6893
  - composts, peat, utilization 8590
  - Dipterocarpaceae, tissue culture 6893
  - *Dryobalanops*
    - genetic variation, population genetics 7364
    - improvement planting, spatial distribution, site factors 6926
  - *Dryobalanops aromatica,* genetic variation, isoenzymes 7365
  - forest resources, genetic resources, nature conservation 4965
  - secondary forests
    - soil chemistry, nutrients 7055
    - stand structure, biomass, estimation 6939
    - understorey, surveys, classification 7307
  - soil surveys, classification 7054
- **Brush control** (*see* Weed control, woody weeds)
- **Brush cutters**
  - Canada
    - reviews 6140
    - work study 9548
  - cleaning, Canada 9550
  - tending, Canada, softwoods 9549
- **Bryophyta,** *Populus tremula,* bark, chemistry, soil chemistry, Sweden 8168
- ***Buchanania obovata,*** foliage, chemistry, Australia 7081
- ***Buchenavia capitata,*** rain forests, wind damage, Puerto Rico 3561
- ***Buchenavia costaricensis,*** taxonomy, Costa Rica 6520
- ***Bucida buceras,*** wood anatomy 4630
- ***Bucida palustris,*** rhizosphere, soil biology, microorganisms, Cuba 1107
- **Budding** (*see* Vegetative propagation, budding)
- ***Buddleja davidii,*** woody weeds, biological control, New Zealand 5142
- **Buds**
  - *Betula pubescens,* coppice, dormancy, plant physiology, seasonal variation 1209
  - *Betula tortuosa,* sexual reproduction, Finland 4731
  - broadleaves
    - dormancy, frost resistance, Canada 4477
    - phenology, plant water relations, Costa Rica 2929
  - *Castanea sativa × Castanea crenata,* phenolic compounds 2970
  - conifers, phenology, climatic change, provenance trials, Finland 2009
  - dormancy
    - *Betula pubescens,* plant physiology, plant growth regulators 3767
    - *Cornus sericea,* stems, cold tolerance, heat stress 7037
    - *Fagus sylvatica,* phenology, stand density, Slovakia 7145
- **Buds** *cont.*
  - dormancy *cont.*
    - growth models, *Fagus sylvatica,* Netherlands 2510
  - *Eucalyptus,* plant growth regulators, gibberellins 3768
  - *Fagus sylvatica,* shoots, France, biomass, development 4638
  - *Larix laricina,* flowering, gibberellins, plant development 9848
  - phenology, climatic change, climatic zones, simulation 7865
  - *Picea abies*
    - dormancy, variation 8046
    - plant growth regulators, gibberellins, metabolism, translocation 9846
    - seedlings, dormancy breaking, temperature 1262
  - *Picea sitchensis,* phenology, carbon dioxide enrichment, temperature, UK 2008
  - *Pinus sylvestris,* plant physiology, seasonal variation, genetic regulation, genetic transformation 5404
  - *Platanus acerifolia,* dormancy, composition, carbohydrates 3761
  - *Populus acerifolia,* street trees 6422
  - *Populus nigra,* tissue culture 4278
  - *Prunus avium,* genetic variation, frost resistance 282
  - *Pseudotsuga menziesii,* flowering, plant morphology, techniques, ionizing radiation 4732
  - *Salix,* coppice, shoots 6392
  - *Salix alaxensis,* shoots, reproductive behaviour 8122
- **Buffer zones**
  - agroforestry, riverbank protection, pollution control, USA 9273
  - national parks, management, nature conservation, biodiversity, Nepal 8446
- **Buildings**
  - foundations
    - amenity trees
      - clay soils
        - databases, UK 10146
        - UK 10145
      - UK, damage, reviews 7609
  - valuation, amenity value of forests, UK 9374
- **Bulgaria**
  - coniferous forests, acid deposition, throughfall, chemistry 7982
  - insect pests
    - *Cinara,* conifers 631
    - *Paranthrene tabaniformis, Populus,* galls, ecology 643
  - *Pinus nigra,* population genetics, isoenzymes 2187
  - *Pinus sylvestris,* genetic variation, isoenzymes 561
  - plant parasitic nematodes, *Pinus,* surveys 9181
- ***Bulnesia arborea,*** deciduous forests, synecology, soil properties, climate, Venezuela 1370
- ***Bunchosia rhombifolia,*** phenology, flowering, fruiting, Venezuela 5368
- ***Bupalus piniarius***
  - insect pests
    - *Pinus sylvestris*
      - air pollution
        - pest resistance, Germany 8335
        - plant composition, Germany 8335
      - Germany, damage 4883
- ***Burenia myrrhidendri,*** fungal diseases, *Myrrhidendron donnell-smithii,* Costa Rica, fruits 9121
- ***Burkea africana,*** forest influences, soil fertility, savannas, Zimbabwe 6369
- **Burkina Faso**
  - agroforestry, development projects, economics, sustainability 1555
  - *Albizia lebbeck,* agroforestry, coppice 10117
  - *Azadirachta indica,* agroforestry, coppice 10117
  - *Detarium microcarpum,* natural regeneration, forest management, development projects 8538

- **Burkina Faso** *cont.*
  - edible species 967
  - *Faidherbia albida*
    - seedlings, increment, plant morphology 6061
    - shoot cuttings, increment, plant morphology 6061
  - forest management, socioeconomics, development projects 8538
  - forest resources, management, women, indigenous knowledge 1633
  - fuelwood, supply, economics 8552
  - land use planning, management, agroforestry 1547
  - *Leucaena leucocephala,* agroforestry, coppice 10117
  - mistletoes, *Tapinanthus, Vitellaria paradoxa* 7414-7415
  - *Parkia biglobosa,* canopy, soil fertility, mycorrhizas 10101
  - savanna woodlands
    - coppice
      - clear felling, regeneration 7768
      - increment 6095
  - tropical forests, forest management, planning 8520
- ***Burretiodendron esquirolii,*** pollen, morphology 2052
- ***Burretiodendron hsienmu,*** pollen, morphology 2052
- ***Burretiodendron kydiifolium,*** pollen, morphology 2052
- ***Bursaphelenchus mucronatus***
  - plant parasitic nematodes
    - *Picea abies,* vectors 1495
    - *Pinus,* cellulase, production, virulence 4896
    - *Pinus pinaster,* Italy 9182
    - *Pinus sylvestris,* vectors 1495
    - *Pinus thunbergii,* Japan, cavitation 2372
    - Russia, surveys 5780
- ***Bursaphelenchus xylophilus***
  - plant parasitic nematodes
    - conifers
      - spread, wood chips, survival 5778
      - USSR, spread, risk 9183
    - *Pinus*
      - cellulase, production, virulence 4896
      - Korea Republic, pathogenicity, control 8346
      - resistance
        - histology 5776
        - plant physiology 5777
    - *Pinus densiflora,* stems, respiration 4895
    - *Pinus sylvestris,* USA 9180
    - *Pinus thunbergii*
      - host parasite relationships 5774
      - Japan
        - cavitation 2372
        - damage, wood anatomy 2373
      - plant water relations 8348
- ***Bursera fagaroides,*** insect pests, *Prostephanus truncatus,* Mexico 7476
- ***Bursera hindsiana,*** mistletoes, *Phrygilanthus sonorae,* Mexico, dispersal 2294
- ***Bursera microphylla***
  - mistletoes, *Phrygilanthus sonorae,* Mexico, dispersal 2294
  - palaeobotany, pollen analysis, Mexico 8147
- ***Bursera schlechtendalii,*** insect pests, *Blepharida,* foliage, resin canals, pest resistance 5751
- **Burseraceae**
  - taxonomy
    - Sabah 7226
    - Sarawak 7226
- **Burundi**
  - browse plants, surveys 8680
  - *Calliandra calothyrsus,* cutting date, fodder, production 2671
  - medicinal plants, ethnobotany, surveys 980
  - multipurpose trees, green manures 8679
- **Bush fallow** (*see* Shifting cultivation)
- ***Butea monosperma***
  - deciduous forests, synecology, remote sensing, India 9638
- ***Butea monosperma*** *cont.*
  - reproductive behaviour, phenology, abscission, India 388
  - species trials, reclamation, sodic soils, India 712
- **Buttresses** (*see* Stem form, buttresses)
- ***Buxus sempervirens***
  - foliage, optical properties, plant composition, analytical methods 1234
  - herbicides, uptake 7788
  - mites, *Eurytetranychus buxi,* Poland 2370
  - sclerophyllous scrub, habit, Spain 3705
- ***Byrsonima coriacea,*** gas exchange, light, Guadeloupe, adaptation 4682
- ***Byrsonima intermedia,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- ***Byrsonima orbignyana,*** biomass, plant colonization, Brazil, estimation 7823
- ***Cabralea cangerana,*** flora, Brazil 7245
- ***Cacajao calvus,*** monkeys, Brazil, *Eschweilera albiflora,* seed predation, seed dispersal 3115
- ***Caesalpinia***
  - flowers
    - development, taxonomy 8976
    - secretion, plant morphology, taxonomy, ecology 8901
  - foliage, glands, taxonomy 2967
  - root nodules, surveys 2235
  - seeds, amino acids, chemotaxonomy 8971
- ***Caesalpinia coccinea,*** taxonomy, Mexico, new species 8961
- ***Caesalpinia coriaria,*** foliage, chemistry, fodder, India 7170
- ***Caesalpinia eriostachys***
  - deciduous forests, forest litter, Mexico 293
  - seedling growth, plant nutrition, nutrient availability 6309
- ***Caesalpinia pulcherrima,*** seed germination, seed treatment 2568
- ***Caesalpinia sepiaria,*** forest nurseries, fertilizers, sewage, India 6905
- ***Caesalpinia velutina***
  - growth models, Central America 220
  - species trials, India 1673
- **Caesalpinieae,** flowers, development, taxonomy 8976
- **Caesalpinioideae**
  - rain forests, soil pH, Zaire, monkeys 9218
  - root nodules, surveys 2235
- ***Cajanus cajan***
  - direct sowing, establishment, contour cultivation, erosion control, Nicaragua 4945
  - parasitic plants, *Santalum album,* increment, India 186
  - ultisols, fertilizers, seed size, pot experimentation 7758
- ***Calamagrostis canadensis,*** weeds, plant competition, soil temperature, plant nutrition 5141
- ***Calamus,*** canes and rattans, foliage, epidermis, plant anatomy, taxonomy 8135
- ***Calamus axillaris,*** plant anatomy, silica 6414
- ***Calamus caesius***
  - canes and rattans, species diversity, reproductive behaviour, Sabah 2013
  - plantations, canes and rattans, silviculture, Indonesia 974
- ***Calamus edulis,*** canes and rattans, forest management, protection of forests, Indonesia 7803
- ***Calamus manan***
  - canes and rattans
    - increment, shade trees, Indonesia 1802
    - nutrient deficiencies, symptoms, seedlings 1128
    - planting stock, survival, growth, mycorrhizas 975
    - silviculture, biology, Indonesia 973
  - plantations, canes and rattans, silviculture, Indonesia 974
- ***Calamus marginatus,*** canes and rattans, species diversity, reproductive behaviour, Sabah 2013
- ***Calamus rotang,*** plant parasitic nematodes, embryo culture, roots, galls 8347
- ***Calamus simplicifolius,*** canes and rattans, edible species, chemistry 2057
- ***Calamus subinermis,*** canes and rattans, stems, morphology, increment, Sabah 7804
- ***Calliandra,*** plant composition, amino acids, chemotaxonomy, evolution 8958
- ***Calliandra calothyrsus***
  - agroforestry
    - choice of species, development projects, Cameroon 6734
    - green manures, decomposition, nutrients, Togo 8422
  - cutting, species trials, biomass production, increment, Western Samoa 1668
  - cutting date, fodder, production, Burundi 2671
  - fodder, biomass production, contour cultivation, Sri Lanka 1799
  - foliage, polyphenols, analytical methods 6817
  - green manures
    - Burundi 8679
    - *Swietenia macrophylla,* seedling growth, Indonesia 1711
  - increment, acid soils, lime, agroforestry, Indonesia 4113
  - insect pests
    - *Leucopholis irrorata,* Philippines 2302
    - Lymantriidae, Philippines 2302
  - parasitic plants, *Santalum album,* increment, India 186
  - provenance, collection, tree breeding 2210
  - pruning trash
    - chemistry
      - decomposition
        - agroforestry
          - Indonesia 1939
          - laboratory tests 1939
  - root nodules, development, seedling growth, temperature 6621
  - seedling growth
    - symbiosis
      - *Bradyrhizobium japonicum,* nitrogen fixation 3151
      - *Rhizobium,* nitrogen fixation 3151
  - shoot cuttings, coppice 1692
  - species trials
    - agroforestry, acid soils, Cameroon 2542
    - fodder, production, Indonesia 3371
    - fuelwood, India 1661
    - Indonesia 1653
- ***Callidiellum rufipenne,*** insect pests, *Cryptomeria japonica,* Japan 7466
- ***Calligrapha verrucosa,*** insect pests, *Salix,* foliage, USA 4032
- ***Callimetopus gloriosus,*** insect pests, *Acacia mangium,* Philippines 3185
- ***Callistemon citrinus,*** fungal diseases, Pakistan, seeds 2257
- ***Callisthene fasciculata,*** biomass, plant colonization, Brazil, estimation 7823
- ***Callisthene major,*** wood anatomy 6430
- ***Callitris,*** wood anatomy, tracheids 2025
- ***Callitris columellaris,*** forest plantations, understorey, biomass production, soil properties, India 4334
- ***Callitris intratropica,*** fire ecology, natural regeneration, Australia 2005
- ***Callixylon,*** palaeobotany, plant development 3889
- **Callus,** *Picea sitchensis,* cell walls, grafting 2043
- ***Calocedrus*** (*see Libocedrus*)
- ***Calomicrus pinicola,*** insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
- ***Calonectria quinqueseptata***
  - fungal diseases
    - *Eucalyptus,* Madagascar, foliage 7403
    - *Eucalyptus tereticornis*
      - India
        - agroforestry 7402
        - climatic factors 7402

Calophyllum antillanum, rhizosphere, soil biology, microorganisms, Cuba 1107

Calophyllum brasiliense
- endangered species, Paraguay 1577
- rain forests, Mexico, wood anatomy 1211
- species trials, Costa Rica 4262

Calophyllum caledonicum, silvicultural characters 9411

Calophyllum inophyllum, cambium, cell division, seasonal variation 4644

Calophyllum lanigerum, medicinal plants, coumarins 9827

Calophyllum longifolium, ultraviolet radiation, plant physiology, Panama 6257

Calophyllum soulattri, seedlings, identification, Indonesia 1324

Calophyllum tetrapterum, plant nutrition, plant succession, Singapore 4543

Caloptilia, insect pests, broadleaves, Europe, taxonomy 9154

Caloptilia serotinella, insect pests, *Prunus serotina,* behaviour 7449

Calothamnus rupestris, seed germination, temperature 76

Calotropis procera
- cell differentiation, laticifers 7162
- indicator species, air pollution, traffic, India 5316
- parasitic plants, *Santalum album,* increment, India 186
- vegetation, reclamation, sodic soils, India 712
- vegetation types, synecology, soil properties, deserts, Saudi Arabia 8162

Calycophyllum candidissimum, buds, phenology, plant water relations, Costa Rica 2929

Calycophyllum spruceanum, insect pests, *Leuronota calycophylli,* Peru, damage 5698

Calyptorhynchus funereus, birds, *Eucalyptus regnans,* forest management, Australia 4066

Calyptranthes, South America, wood anatomy 6415

Calyptranthes krugii, cloud forests, precipitation, deposition, Puerto Rico 2789

Cambium
- *Abies balsamea*
  - IAA, biochemistry, seasonal variation 5403
  - molecular genetics 3127
- age, *Fagus sylvatica,* vessels 2945
- *Eucalyptus,* plant growth regulators, gibberellins 3768
- *Fagus sylvatica*
  - age of trees, image processing 6398
  - image processing 6399
- forest trees, cell division, seasonal variation 4644
- growth
  - development, *Tilia cordata* 7156
  - grain and figure, *Tilia cordata* 390
- *Larix laricina,* plant development, biochemistry 9786
- pectins, *Populus canadensis,* France, seasonal variation 3757
- *Pinus sylvestris,* enzymes, proteinases, wood anatomy, cell differentiation 9854
- *Pinus taeda,* gene expression 5506
- *Pseudotsuga menziesii,* genetic variation, phenology, USA 4828
- *Thuja occidentalis,* Germany, sucrose, seasonal variation 431
- wood anatomy, books 5924

Cambodia
- deforestation, land use, sustainability, water resources 707
- forest economics, deforestation, land use, fishing 7570

Cameraria, insect pests, *Quercus emoryi,* USA, damage 642

Cameraria ohridella
- insect pests
  - *Acer pseudoplatanus,* Austria 9158
  - *Aesculus hippocastanum*
    - Austria 9158
    - Germany 5726

Cameroon
- biosystematics, flora 5427

Cameroon *cont.*
- community forestry, mountain forests, biodiversity, conservation 9293
- *Eucalyptus saligna,* growth models, site factors 8701
- forest management
  - biodiversity, nature conservation 6196
  - forest ownership, forest policy 8518
- forest resources
  - agroforestry 9396
  - utilization, socioeconomics 8530
- forest trees, foliage, photosynthesis, plant water relations 313
- fungal diseases, *Heritiera utilis,* damage, surveys 10030
- insect pests
  - Cerambycidae, *Heritiera utilis,* damage, surveys 10030
  - Cossidae, *Heritiera utilis,* damage, surveys 10030
  - *Godasa sidae, Mansonia altissima,* biology 9161
- *Lophira alata,* rain forests, history, pollen analysis 2130
- multipurpose trees
  - agroforestry, choice of species, development projects 6734
  - species trials, agroforestry, acid soils 2542
- *Nauclea diderrichii,* spacing, increment, stem form 3458
- rain forests, nature conservation, projects, biodiversity 7600
- *Sacoglottis gabonensis,* rain forests, history, pollen analysis 2130
- savanna woodlands, deforestation, land use planning, development projects 4952
- *Triplochiton scleroxylon*
  - forest plantations
    - forest borders
      - increment 4594
        - equations 5013
- tropical forests, remote sensing, radiometry, mapping 6230
- wood anatomy, timbers, identification 1216

Camping, economics, USA, national forests 2428

Campomanesia velutina, reproductive behaviour, Brazil 3027

Camponotus quadriceps, Formicidae, *Endospermum labios,* Papua New Guinea, insect pests, interactions 1473

Camptotheca acuminata
- medicinal plants
  - reviews
    - China 7618
    - USA 7618

Canada
- *Acer saccharum,* soil biology, arthropods, mycorrhizas 7928
- acid deposition, forest health 9739
- air pollution, damage, forest economics 2779
- *Betula,* frost injury, climate 9672
- biomass, for energy, research, bibliographies 8478
- boreal forests
  - climatic change, carbon cycle, research projects 9943
  - ecotones, *Picea mariana,* natural regeneration, simulation 799
  - forest health, monitoring 9866
  - forest management
    - forest ecology 4427
    - nature conservation, simulation 9621
    - sustainability, international cooperation 9941
  - land use, climatic change, socioeconomics 8540
- brush cutters, reviews 6140
- carbon cycle, simulation 3623
- controlled burning, forest management, silviculture 2002
- diseases, forest trees, books 7633
- fire behaviour, simulation 8877
- forest inventories
  - data collection, equipment, computer techniques 1024

Canada *cont.*
- forest inventories *cont.*
  - mapping, production 6995
- forest management
  - community forestry 6738
  - sustainability 3491, 4422
    - assessment, international cooperation 9620
- forest statistics, reports 8476
- forest trees
  - biodiversity, tree breeding, conservation, research 3124
  - forest litter, decomposition, nitrogen, availability 7912
  - height, growth models, site class assessment 4417
  - increment, measurement, research 1643
  - soil chemistry, cation exchange capacity 5250
- forestry
  - forest policy
    - Europe 43
    - European Communities 43
  - insecticides, research 2380
  - research 52
- forests, climatic change, simulation 7870
- fungal diseases
  - damage 8543
  - *Endocronartium harknessii, Pinus banksiana,* thinning, distribution 6632
  - *Lophodermium pinastri, Pinus resinosa* 5657
  - *Phellinus weirii, Pseudotsuga menziesii,* control 9100
- genetic resources
  - conservation 9026
  - forest trees 7340
- insect pests
  - *Choristoneura fumiferana*
    - *Abies balsamea,* damage, stand structure 7536
    - conifers, stand development, simulation 4224
    - control, public opinion 2381
  - conifers, seed orchards, pest management 6667
  - control 9190
  - damage 8543
  - *Dendroctonus rufipennis,* forest management, decision making, risk 4892
  - Lepidoptera, conifers, foliage, terpenoids 9146
  - *Lymantria dispar,* history 2333
  - *Zeiraphera canadensis, Picea glauca,* reviews 3180
- nature conservation, old-growth forests 6746
- noise, safety, protective clothing 1648
- old-growth forests, forest inventories 6543
- ornamental woody plants, shoot cuttings, landscape 6041
- *Picea,* forest nurseries, container grown plants, growing media, *Sphagnum* 6082
- *Picea glauca,* genetic variation, isoenzymes 9977
- *Picea mariana*
  - forest nurseries, growing media, water stress 6083
  - stand density, site class assessment, methodology 4399
  - wood density, variation, methodology 2896
- *Pinus*
  - controlled burning, forest management 4610
  - research 4247
- *Pinus ponderosa,* genetic variation, gas exchange, photosynthesis, transpiration 8198
- *Pinus strobus,* forest inventories, volume 4383
- planting stock, container grown plants, cold storage, boxes 5119
- *Populus,* forest resources 4241
- *Populus tremuloides,* woody weeds, control, herbicides 1770

Canada *cont.*

- *Pseudotsuga menziesii,* genetic variation, gas exchange, photosynthesis, transpiration 8198
- silviculture
  - conferences 4172
  - forest management, computer techniques, decision making, planning 9368
- site preparation, forestry machinery, tyres 4366
- wildlife, forest management, logging 4912
- Alberta
  - bison, *Populus tremuloides,* geographical distribution, grazing 7268
  - boreal forests
    - climatic change, permafrost 7871
    - forest management, wildlife, nature conservation 3500
    - forestry practices, soil compaction, tillage 1089
    - geographical distribution, climate 4771
  - Christmas trees, economics 4372
  - cleaning, brush cutters 9550
  - conifers
    - nitrogen fertilizers
      - peat soils
        - distribution 3411
        - uptake 3410
    - stand development, methodology 2169
  - forest fires, subalpine forests, avalanches 1997
  - forest management, land classification 255
  - forest trees, forest litter, decomposition, microorganisms 5263
  - fungal diseases
    - *Phellinus tremulae*
      - *Populus tremuloides* 8345
        - galls 5623
    - *Phoma etheridgei, Populus tremuloides* 8300
  - geographical information systems 247
  - insect pests
    - *Aceria parapopuli, Populus tremuloides,* galls 8345
    - *Hylobius warreni,* conifers, reviews 7467
  - *Larix lyallii,* dendrochronology, treelines 10162
  - mycorrhizas, ecology, *Pinus banksiana,* forest fires 7394
  - *Picea glauca*
    - growth models, height, stand characteristics 1838
    - improvement fellings, *Populus,* growth 175
    - increment
      - canopy, light penetration 1757
      - wind damage, dendrochronology 3484
  - *Pinus banksiana,* forest fires, natural regeneration, wood ash 1198
  - *Pinus contorta,* genetic variation, heritability, seedling growth 5479
  - *Populus*
    - forest fires, fire danger, fuels, soil water 8030
    - natural regeneration, vegetative propagation 6507
  - *Populus tremuloides*
    - genetic variation, molecular genetics 595
    - growth models, height, stand characteristics 1838
    - logging, stand development 9588
    - major elements, herbicides 7975
    - tumours, anatomy 8116
  - remote sensing, mapping, fire danger, classification 8731
  - riparian forests, *Populus,* water stress, cavitation 1118
  - rotations, tax incentives, carbon, storage 8546
  - site preparation
    - forestry machinery 1792

Canada *cont.*

- Alberta *cont.*
  - site preparation *cont.*
    - herbicides, spraying equipment 2641
    - implements, work study 8669
  - soil fauna, Oligochaeta, *Populus tremuloides,* growth 4502
  - subalpine forests, fire behaviour, simulation, prediction 6375
  - woody weeds, canopy, light penetration, control 1757
- British Columbia
  - *Abies amabilis,* plant colonization, canopy gaps 542
  - *Abies procera,* provenance trials, increment, climate 2549
  - *Alnus rubra*
    - genetic variation, plant physiology 5478
    - weed control, biological control, *Chondrostereum purpureum* 3451
  - *Betula papyrifera,* thinning, plant physiology, effects 9516
  - birds, coniferous forests, plant succession 4927
  - boreal forests
    - soil chemistry 1906
    - stand characteristics, biomass production, simulation 9596
  - *Chamaecyparis*
    - palaeobotany 6527
    - provenance trials 64
  - *Chamaecyparis nootkatensis*
    - frost resistance, provenance, altitude 1083
    - planting stock, plant physiology, roots 4335
  - clear felling, site preparation, altitude, soil water regimes 3447
  - coniferous forests, soil fauna, composition 3591
  - conifers
    - clear felling, soil properties, understorey 3585
    - forest litter, nitrogen, mineralization 6288
    - humus, mineralization, fertilizers 6289
    - mixtures, site class assessment, yield forecasting 5177
    - regeneration surveys, techniques 248
    - seed germination, stratification, light 4270
    - seed orchards, pollination, methodology 9873
    - site preparation, weed control, *Rubus parviflora* 163
    - soil organic matter, mixing, nutrients 6278
    - weed competition, *Gaultheria shallon,* growth 9514
  - deer
    - *Odocoileus hemionus*
      - browse 1505
      - forest management, logging 239
  - forest economics, logging, analysis, socioeconomics 4457
  - forest management
    - community forestry 6739
    - land classification 257
    - sustainability, forest policy 7835
  - forest trees
    - decay, measurement, statistical analysis 4392
    - volume determination, stumps, residues 2684
  - forestry, sustainability, multiple use 6851
  - forestry workers, education 2535
  - fungal diseases
    - *Acer macrophyllum,* mycoherbicides 8254
    - *Armillaria ostoyae,* control, machinery 5160
    - *Endocronartium harknessii, Pinus contorta,* resistance 5641

Canada *cont.*

- British Columbia *cont.*
  - fungal diseases *cont.*
    - *Heterobasidion annosum, Abies amabilis* 2263
    - *Ophiostoma, Pinus contorta,* insect pests, *Dendroctonus* 6637
    - *Phellinus tremulae, Populus tremuloides* 8345
    - *Phellinus weirii, Pseudotsuga menziesii,* control 9125
    - rust diseases, *Pinus contorta,* stand density 6631
    - *Septoria populicola, Populus trichocarpa* 8308
  - hares, *Lepus americanus,* boreal forests, herbicides 4060
  - insect pests
    - *Aceria parapopuli, Populus tremuloides,* galls 8345
    - *Coleophora laricella, Larix occidentalis* 638
    - *Dendroctonus ponderosae*
      - *Pinus contorta*
        - control 7479
        - fungal diseases, *Ophiostoma* 6637
    - *Dreyfusia piceae, Abies,* predators 5695
    - *Dryocoetes confusus*
      - *Abies lasiocarpa*
        - aggregation pheromones 1489
        - chemical control 1489
    - *Ips pini, Pinus contorta,* aggregation pheromones 6658
    - *Lambdina fiscellaria, Tsuga canadensis,* pheromones 5705
    - Lepidoptera, conifers, defoliation 4047
    - *Orgyia pseudotsugata,* conifers, control 5797
    - *Pissodes strobi*
      - conifers, integrated pest management 7497
      - *Picea omorika,* damage 651
      - *Picea sitchensis,* resistance 1490
    - Scolytidae, *Pinus contorta,* interactions 2345
  - land use
    - multiple use, simulation 9258
    - wilderness, economic evaluation, simulation 1872
  - *Larix lyallii,* dendrochronology, treelines 10162
  - *Litocarpon beardii,* palaeobotany 8051
  - logging, natural regeneration, forest management, decision making 4321
  - mountain forests, climate, stand characteristics, simulation 7332
  - old-growth forests, forest economics, nature conservation 7015
  - palaeoecology 4757
  - *Picea*
    - artificial regeneration, site preparation, planting 9508
    - forest nurseries, container grown plants, seedling growth 139
    - planting stock
      - plant water relations, damage 905
      - seedling growth, damage 905
  - *Picea engelmannii,* logging effects, plant competition, growth 4580
  - *Picea glauca*
    - boreal forests, artificial regeneration, seedlings 9503
    - fertilizers
      - foliage
        - chemistry 887
        - weight 887
    - frost resistance, provenance trials 1084
    - site class assessment 8704
    - temperature, planting stock, storage 6079

Canada *cont.*
  British Columbia *cont.*
    Picea glauca cont.
      yield forecasting, site factors, plant height 3489
    Picea glauca × Picea engelmannii
      planting stock
        seedlings, physiology 1728
        somatic embryogenesis, physiology 1728
      seedling growth, bacteria 7926
    Picea sitchensis
      seed orchards
        genetic diversity 3982
        reproductive behaviour, estimation 4266
    Pinus, palaeobotany, flowers 5378
    Pinus contorta
      container grown plants, roots, growth 2046
      controlled burning, site preparation, artificial regeneration 8880
      nitrogen fertilizers, plant nutrition, increment 9462
      plant competition, ground vegetation 1745
      plant nutrition, nitrogen cycle, fertilizers 325
      provenance trials
        adaptation, geographical distribution 2548
        site class assessment 3367
        spacing 9419
      stem form, taper 4385
      sulfur fertilizers, nitrogen fertilizers, foliage 897
      vegetation management, controlled burning, edible species 374
    planting stock, roots, forest litter, morphology 6900
    Populus interamericana, short rotation forestry, irrigated stands, growth 1752
    Populus tremuloides, vegetation management, controlled burning, edible species 374
    Pseudotsuga menziesii
      container grown plants, roots, growth 2046
      forest litter, soil chemistry, nitrogen 9706
      forest management, decision making, computer techniques 1623
      genetic variation, chloroplast genetics, restriction fragment length polymorphism 4827
      grafting, rootstocks 2590
      growth models, plant competition 9361
      height classes 230
      increment, transpiration, simulation 3000
      progeny testing, wood properties, shrinkage 3984
      pruning, work study, economics 4358
      seed orchards
        genetic diversity 5065
        pollination, contamination 4813
      site class assessment 230
      stumps, Collembola, plant succession 4028
      thinning, understorey, biomass 3454
      tree breeding, genetic gain, increment 3135
      urea fertilizers, snow, application methods 4301
    rain forests
      nature conservation, planning, traditional society 2426
      stand characteristics, stand age 6544
    remote sensing, thematic mapper, volume determination, coniferous forests 5203

Canada *cont.*
  British Columbia *cont.*
    rotations, tax incentives, carbon, storage 8546
    Salix, genetic variation, isoenzymes 9062
    silvicultural systems, logging, costs 7855
    silviculture, decision making, investment 238
    site preparation, controlled burning 8629
    squirrels, *Tamiasciurus hudsonicus, Pinus contorta,* prevention 1511
    Taxus brevifolia, genetic variation, isoenzymes, inbreeding 574
    thinning, forestry machinery 4368
    Thuja plicata
      planting stock
        frost resistance, plant morphology 1724
        plant physiology, measurement 1723
      seedling growth, light 6253
      self pollination 2110
    Tsuga heterophylla
      air pollution, forest economics, growth 4557
      site class assessment, soil chemistry, plant composition 8776
    Vaccinium, vegetation management, controlled burning, edible species 374
    vertebrates, vegetation types, forest fires 9220
    wildlife
      Rangifer tarandus, Abies lasiocarpa, lichens 5809
      salamanders, coniferous forests, stand age 9221
      site preparation, mechanical methods 10074
    woody weeds, control, *Rubus parviflora* 163
  Manitoba
    birds, *Picoides,* boreal forests, feeding behaviour 7520
    bison, *Populus tremuloides,* geographical distribution, grazing 7268
    boreal forests
      climatic change, permafrost 7871
      evapotranspiration, soil water balance 7949
      geographical distribution, climate 4771
    coniferous forests, evapotranspiration 1926
    forest management, land classification, information needs 254
    forest trees, respiration, foliage, nitrogen 8102
    forests, evapotranspiration, simulation 7948
    Fraxinus pennsylvanica
      foliage, development, pruning 2956
      shoots, development, morphology 2947
    insect pests, *Hylobius radicis, Pinus sylvestris,* damage 7484
    Picea mariana, coniferous forests, light penetration 1060
    Pinus banksiana, seed germination, radionuclides 2861
    remote sensing, radiometry, land use 1861
    treelines, forest influences, energy balance 3693
  New Brunswick
    Acer saccharum, foliage, herbicide residues 5139
    advance growth, logging, conifers, survival 4581
    Betula papyrifera, acid deposition, reproductive behaviour 3659
    birds, coniferous forests, surveys 9201
    coniferous forests, air pollution, sulfur dioxide, simulation 6346
    conifers, thinning, planning 4353

Canada *cont.*
  New Brunswick *cont.*
    control, woody weeds, *Rubus idaeus, Picea mariana* 6931
    deciduous forests, clear felling, solar radiation, albedo 8009
    forest inventories, data collection, methodology 6814
    forest trees, natural regeneration, logging, microclimate 8623
    forests
      land classification 250
      pesticides, aerial application, simulation 9365
    fungal diseases, *Nectria,* deciduous forests 1462
    insect pests
      Choristoneura fumiferana
        parasitoids 5723
        Picea glauca 639
      Sacchiphantes abietis, Picea glauca 7442
      Zeiraphera canadensis
        Picea glauca 5722, 7448
          ecology 5694
          phenology 647
          resistance 2319
    insecticides, residues, water pollution 5801
    Larix laricina
      endophytes 6607
      seed orchards, pollen, contamination 4269
    palaeoecology 6532
    Picea
      air pollution, photosynthesis, simulation 1973
      shoots, cones, plant morphology 9787
    Picea mariana
      seed cones, equations 9347
      seed orchards, pollen, seasonal variation 5423
      somatic embryogenesis, techniques 4275
      tree breeding, early selection, increment 9042
    Picea rubens, foliage, air pollution, sulfur dioxide 8856
    private forestry
      forest economics, employment, subsidies 9644
      taxes 1639
    site preparation, equipment 187
    weed control, *Rubus idaeus, Picea mariana* 8633-8634
  Newfoundland
    Abies balsamea
      natural regeneration, density, sampling 2500
      site class assessment 1008
    Amelanchier, ornamental woody plants, silvicultural characters 2436
    deer, *Rangifer tarandus,* clear felling, ecology 687
    forest management, hunting, *Alces alces,* valuation 9219
    forests, land classification 249
    insect pests, *Choristoneura fumiferana,* forest management, sustainability 237
    Kalmia angustifolia, detection, remote sensing 3512
    Picea
      boreal forests, plant succession, forest fires 9949
      seed collection, harvesting date, seedling growth 80
    Picea mariana
      degraded forests, natural regeneration, remote sensing 7838
      increment, NPK fertilizers, spacing 1714
      natural regeneration, density, sampling 2500
      plant nutrition, NPK fertilizers, spacing 1714
      site class assessment 1008

Canada *cont.*
- Newfoundland *cont.*
  - *Pinus resinosa*
    - forest fires
      - roots, development 3866
      - seed germination, seedling growth 3866
  - site preparation, forestry machinery, scarifiers, disc cultivators 1795
- Northwest Territories
  - boreal forests, geographical distribution, climate 4771
  - dendrochronology, old and fossil wood 8464
  - forest litter, logs, dendrochronology, dispersal 5913
  - forest trees, forest fires, treelines, global warming 3700
  - forests, land classification 256
  - *Pinus banksiana,* forest fires, natural regeneration, wood ash 1198
  - remote sensing, mapping, fire danger, classification 8731
- Nova Scotia
  - *Amelanchier,* ornamental woody plants, silvicultural characters 2436
  - fungal diseases, *Nectria,* deciduous forests 1462
  - palaeoecology 6532
  - *Picea mariana,* genetic variation, increment, height 6589
  - wildlife, birds, forest trees, herbicides 5829
- Ontario
  - *Acer platanoides,* frost resistance 6250
  - *Acer saccharum*
    - dendrochronology
      - forest decline, simulation 1591
      - techniques, mass spectrometry 5006
    - stand structure 4764
  - *Betula papyrifera,* stomatal resistance, gas exchange, simulation 801
  - birds, deciduous forests, forest ecology, fragmentation 4916
  - boreal forests
    - forest fires, fire danger, ground vegetation 9770
    - plant succession 4788
    - water pollution, methylmercury 3678
    - woody plants, fruits, plant composition 8673
  - broadleaves
    - agroforestry, soil water, microclimate 9278
    - energy relations, measurement, techniques 6262
    - irrigation, leachates, plant physiology 1753
  - coniferous forests
    - aesthetic value 4377
    - throughfall, chemistry 1991
  - conifers
    - air pollution, mercury, deposition 8854
    - direct sowing, soil compaction 2634
    - forest nurseries, seedling growth, container grown plants 8595
    - forest plantations, site class assessment 8703
    - palaeoecology, stomata 8146
    - plant competition, woody weeds, growth 4407
    - plant nutrition, soil fertility, forestry practices 7793
    - regeneration surveys, techniques 248
    - silviculture, plant nutrition, translocation 6324
    - spacing, crown, growth 4331
  - deciduous forests
    - air pollution, canopy, deposition 1168
    - canopy, forest influences, atmosphere 9763
    - dendrochronology, climate, soil 4142

Canada *cont.*
- Ontario *cont.*
  - deciduous forests *cont.*
    - throughfall, chemistry 1991
  - deer, *Alces alces,* telemetry, global positioning systems 9208
  - fire danger, fuels, height, forest plantations 6957
  - forest borders, landscape ecology, species diversity 4747
  - forest fires
    - statistics, costs, analysis 4606
    - streams, erosion, sediment yield 8884
  - forest management
    - community forestry 6740
    - planning, data analysis 2498
  - forest trees
    - carbon cycle 4490
    - seedlings, roots, morphology 9784
    - stumpage value 9651
    - yield forecasting, simulation 4200
  - forestry workers, education 2536
  - forests, land classification, forest ecology, forest inventories 253
  - insect pests
    - *Acantholyda erythrocephala, Pinus,* control 678
    - *Choristoneura fumiferana*
      - *Abies balsamea,* biological control 676, 7503
      - *Bacillus thuringiensis,* resistance 8354
      - parasitoids 5723
      - *Picea mariana,* biological control 676
    - *Choristoneura pinus, Pinus banksiana,* population dynamics 5715
    - Lepidoptera, *Picea glauca,* chemical control 9187
    - *Lymantria dispar, Quercus,* biological control 677
    - *Pissodes strobi*
      - *Pinus banksiana* 2359
        - control 9186
    - *Rhopalosiphum padi, Prunus virginiana* 7436
  - *Juniperus virginiana,* stand characteristics, sex ratio 549
  - landscape, forests, land use, change 6753
  - mycorrhizas, *Pinus,* site preparation, burning 7387
  - non-wood forest products, forest economics, valuation, reviews 4456
  - peatlands, drainage, soil air, methane 9510
  - *Picea,* spacing, increment, juvenile wood 2899
  - *Picea abies,* pollination 2105
  - *Picea glauca*
    - fertilizers, weed control 1749
    - forest nurseries, fertilizers, interactions 2619
    - insecticides
      - metabolites, persistence 9187
      - tebufenozide, persistence 9198
    - nitrogen fertilizers, weed control, irrigation 4337
    - seed orchards, pollination, population genetics 564
  - *Picea mariana*
    - direct sowing
      - seedbeds 4332, 6925
        - site factors 4330
    - gas exchange
      - carbon pathways, genetic variation 9041
      - genetic variation, genotype environment interaction 9851
    - genetic variation, seedling growth, phenology 3980
    - natural regeneration, seedbeds 6925
    - provenance, plant physiology 8931
    - site class assessment, height, equations 1616

Canada *cont.*
- Ontario *cont.*
  - *Picea mariana cont.*
    - tree breeding, drought resistance, biomass 5477
    - wood properties, increment, spacing 1182
  - *Pinus*
    - improvement fellings 4421
    - wildlife, forest management 4906
  - *Pinus banksiana*
    - cones, life tables, statistical analysis 3843
    - direct sowing, insect pests, damage 2359
    - forest plantations, insecticides, application 5794
  - Pinus banksiana, forest plantations, thinning, fungal diseases 6632
  - *Pinus banksiana*
    - injuries, thinning 946
    - planting, insect pests, damage 2359
    - thinning
      - plant morphology, growth 6127
      - wood density, increment 6364
    - tree breeding, increment, statistical analysis 794
    - volume determination, equations 1819
  - *Pinus resinosa*
    - crown, development, increment, spacing 1225-1226
    - forest plantations, thinning, growth models 5966
    - gas exchange, ground vegetation, soil biology 7128
    - site class assessment, increment 8702
    - stand development, growth 4408
  - *Pinus strobus*
    - cones, production, gibberellins 9855
    - improvement fellings 4354
    - shelterwood system 4316
  - pollen analysis, vegetation, history, climatic change 2124
  - *Populus* 'DN-74', coppice, thinning 148
  - *Populus tremuloides*
    - site class assessment, equations, models 7820
    - stomatal resistance, gas exchange, simulation 801
  - *Quercus,* selective felling, forest ecology, plant colonization 3427
  - *Quercus rubra,* shelterwood system, underplanting, weed control 9487
  - remote sensing
    - coniferous forests, statistical analysis 2753
    - geology, vegetation types 260
    - multispectral imagery, stand structure, simulation 8739
    - vegetation types, statistical analysis, classification 2752
  - streams, *Bacillus thuringiensis* subsp. *kurstaki,* bacterial insecticides, nontarget effects 6644
  - stumpage value 9652
  - surveying, global positioning systems, testing 7000
  - synecology, trails, damage 10135
  - *Thuja occidentalis*
    - dendroclimatology 2440
    - increment, plant physiology 8699
    - stems, anatomy, plant water relations 2936
  - wetlands
    - forest influences, air, methane 361
    - synecology, site factors 8159
  - wildlife
    - *Castor canadensis,* animal behaviour 4904
    - *Martes americana,* clear felling, boreal forests 3204-3205
- Prince Edward Island, fungal diseases, *Nectria,* deciduous forests 1462

- **Canada** *cont.*
  - Quebec
    - *Abies balsamea*
      - boreal forests, site class assessment, site factors 9597
      - essential oils, terpenoids 2972
      - foliage, air pollution, metals 8833
    - *Acer platanoides,* frost resistance 6250
    - *Acer rubrum,* coppice, cutting date, biomass production 923
    - *Acer saccharum*
      - deciduous forests, fertilizers, cycling 886
      - fertilizers
        - nutrient deficiencies, potassium 2615
        - soil chemistry, cycling 888
      - forest decline 3813
      - forest litter, decomposition, fertilizers 885
      - frost resistance, drought injury, sap flow 9676
      - isoenzymes, population genetics, air pollution 9986
      - nutrient deficiencies, soil chemistry, cation exchange 7972
      - plant composition
        - drought injury, abscisic acid 278
        - frost injury, abscisic acid 278
      - soil chemistry, nitrates, soil temperature 9694
      - soil fauna, Oligochaeta, forest decline 5275
      - soil water, freezing, snow, forest decline 2811
      - vegetation types, landscape ecology 3910
    - *Betula papyrifera,* mixtures, increment 4361
    - birds
      - *Abies balsamea,* insect pests, ecology 7536
      - clear felling, *Abies balsamea,* buffer zones 4072
    - boreal forests
      - photosynthesis, respiration 8924
      - plant succession, fires 4789
      - riparian forests, birds, species diversity 10072
    - broadleaves
      - buds, dormancy, frost resistance 4477
      - deciduous forests, natural regeneration, seed banks 3119
      - mulches, herbicides, plant nutrition 5135
      - selection system 2629
    - brush cutters, work study 9548
    - coniferous forests, soil chemistry, sulfur, losses 7891
    - conifers
      - natural regeneration, forest fires 8882
      - pollen, maturation, temperature 6038
      - silvicultural systems, natural regeneration 8621
    - deciduous forests
      - forest borders, statistical analysis 5962
      - plant succession, simulation 4787
    - deer, *Odocoileus virginianus,* riparian forests, habitats 4903
    - forest inventories, remote sensing, image interpretation 243
    - forest litter, decomposition, broadleaves, vegetation types 4493
    - forest nurseries, fertilizers, requirements, assessment 908
    - forest trees
      - fertilizers, mulching, seedling growth 6116
      - reproductive behaviour 478
    - forests
      - classification, synecology, disturbed land 1357
      - land classification
        - forest inventories 252

- **Canada** *cont.*
  - Quebec *cont.*
    - forests *cont.*
      - land classification *cont.*
        - forest management, forest ecology 251
      - landscape, simulation 4097
    - *Fraxinus nigra,* reproductive behaviour, floodplains 3834
    - *Fraxinus pennsylvanica,* floods, erosion, stand structure 3111
    - fungal diseases, *Heterobasidion annosum, Pinus resinosa* 9101
    - insect pests
      - *Choristoneura fumiferana*
        - *Abies balsamea*
          - dendrochronology 5702
          - stand development 1412
      - Lepidoptera, *Betula,* behaviour 5716
      - *Lymantria dispar,* population dynamics, simulation 5709
      - *Pissodes strobi*
        - *Picea* 5750
        - *Pinus strobus* 5750
      - *Pristiphora erichsonii*
        - *Larix laricina*
          - dendrochronology 5764
            - introduced species 1486
    - *Larix*
      - stems
        - major elements, distribution 4666
        - nutrients, distribution 5291
    - mapping, ecosystems, methodology 7004
    - maps, geographical information systems, basal area, botanical composition 4451
    - nature conservation, land use planning, urban areas 8439
    - *Picea,* boreal forests, plant succession, forest fires 9949
    - *Picea abies,* forest plantations, soil chemistry, nutrients 5358
    - *Picea glauca*
      - browsing damage, repellents, selenium 4905
      - genetic variation, wood properties 559
      - wood anatomy, environmental factors 3684
    - *Picea mariana*
      - advance growth, height, yield forecasting 9491
      - early selection, climatic change 3978
      - forest nurseries, stems, deformation 1729
      - growth rings, air pollution, mercury 9737
      - increment
        - Arctic regions 1827
        - stem form, treelines 2688
      - lichens, air pollution, mercury 8832
      - peatlands, palaeoecology 8149
      - provenance
        - plant physiology 8931
        - plant water relations, seasonal variation 1110
      - seedling growth, plant competition, light 3880
      - treelines
        - climatic change, history 2127
        - vegetation, history 514
      - volume tables 215
    - *Picea pungens,* dendrochronology, soil pollution, manganese 3680
    - *Pinus banksiana,* mixtures, increment 4361
    - *Pinus resinosa,* forest plantations, soil chemistry, nutrients 5358
    - *Pinus strobus*
      - forest management, logging 4420
      - genetic variation
        - isoenzymes, population genetics 3983
        - plant morphology 8197

- **Canada** *cont.*
  - Quebec *cont.*
    - *Pinus strobus cont.*
      - population genetics, isoenzymes 5491
    - planting, beating up, work study 7771
    - *Populus balsamifera,* stand development 6579
    - *Populus tremuloides*
      - mixtures, increment 4361
      - natural regeneration, forest litter, site preparation 3434
    - *Quercus rubra,* seedling growth 8899
    - *Salix*
      - fertilizers, sewage sludge, biomass production 9459
      - short rotation forestry, weed control, soil water 917
    - tending, brush cutters, softwoods 9549
    - Ursidae, *Ursus americanus,* animal behaviour 8358
    - vegetation types, biodiversity, nature conservation 6747
    - weed control, *Picea mariana,* light, measurement 2486
    - woody weeds, control, *Kalmia angustifolia* 164
  - Saskatchewan
    - birds, species diversity, *Populus tremuloides* 3217
    - bison, *Populus tremuloides,* geographical distribution, grazing 7268
    - boreal forests
      - carbon dioxide enrichment, conservation, management 9942
      - climatic change, permafrost 7871
      - forest management, environmental impact, assessment 9622
      - geographical distribution, climate 4771
    - forest management, sustainability, planning, simulation 9619
    - *Fraxinus pennsylvanica,* plant competition 8988
    - harrows, site preparation, work study 9547
    - rangelands, *Artemisia frigida,* weed control 5145
    - regeneration surveys, remote sensing, aerial photography 258
    - *Salix,* genetic variation, isoenzymes 9062
    - shelterbelts
      - erosion control, soil properties 8386
      - tree breeding, broadleaves 3967
  - Yukon Territory
    - boreal forests, ground vegetation, *Lepus americanus* 9227
    - forests, land classification 256
    - *Pinus contorta,* provenance trials, site class assessment 3367
- ***Canarium***
  - taxonomy
    - Sabah 7226
    - Sarawak 7226
- **Canary Islands**
  - alpine vegetation 3930
  - cloud forests, water resources, ecosystems 7295
  - flora, endangered species, national parks, conservation, planning 8440
  - forest trees, species trials, rehabilitation 6032
  - Lauraceae, silvicultural characters 8888
- **Canes and rattans**
  - *Calamus*
    - foliage, epidermis, plant anatomy, taxonomy 8135
    - plantations, silviculture, Indonesia 974
    - species diversity, reproductive behaviour, Sabah 2013
  - *Calamus edulis,* forest management, protection of forests, Indonesia 7803
  - *Calamus manan*
    - increment, shade trees, Indonesia 1802

Canes and rattans *cont.*
- *Calamus manan cont.*
  - nutrient deficiencies, symptoms, seedlings 1128
  - planting stock, survival, growth, mycorrhizas 975
  - silviculture, biology, Indonesia 973
- *Calamus rotang,* plant parasitic nematodes, embryo culture, roots, galls 8347
- *Calamus simplicifolius,* edible species, chemistry 2057
- *Calamus subinermis,* stems, morphology, increment, Sabah 7804
- choice of species
  - Asia
    - conferences 7714
    - handbooks 7714
- *Daemonorops hystrix*
  - insect pests
    - *Macrochirus praetor*
      - Indonesia
        - control 2379
        - damage 2342
        - light 2342
- *Daemonorops margaritae,* edible species, chemistry 2057
- *Daemonorops melanochaetes,* forest nurseries, fertilizers, Indonesia 1803
- forest inventories, sampling, Indonesia 1847-1849
- forest resources, Bangladesh 810
- forestry development, Indonesia 971
- genetic resources, Bangladesh 1574
- improvement planting, Indonesia 972
- *Korthalsia furtadoana,* species diversity, reproductive behaviour, Sabah 2013
- plant morphology, Malaysia, roots, growth 6434
- planting, Peninsular Malaysia 976
- research, networks, periodicals 6767

Canis lupus lycaon, wolves, USA, habitats 7526

Cankers (*see* Fungal diseases)

Canopy
- *Abies pindrow,* natural regeneration, light, Pakistan 5465
- *Acacia erubescens*
  - woodland grasslands
    - ground vegetation, South Africa 359
    - soil fertility, South Africa 359
- *Acacia farnesiana,* precipitation, Mexico, simulation 2398
- *Acacia tortilis,* forest influences, Kenya, understorey, grasslands 4601
- *Atherosperma moschatum,* rain forests, light, Australia 3536
- broadleaves, crown, plant morphology 8065
- *Casuarina equisetifolia,* acid deposition, nitrogen, India 5310
- chemistry, *Pinus pinaster,* remote sensing, France 6226
- classification, plant succession, Russia, theory 7013
- *Combretum apiculatum*
  - woodland grasslands
    - ground vegetation, South Africa 359
    - soil fertility, South Africa 359
- conifers, light penetration, simulation 5223
- *Cryptomeria japonica*
  - light, Japan, leaf area index 4468
  - stand structure, Japan, growth, plant morphology 6970
- deciduous forests
  - air pollution, Canada, deposition 1168
  - ultraviolet radiation, USA 1884
- deposition, *Picea sitchensis,* air pollution, ozone, UK 7987
- development, *Populus* 'Beaupré', plant competition 7381
- *Diospyros texana,* precipitation, Mexico, simulation 2398
- energy relations, simulation 1284
- *Eucalyptus globulus,* forest plantations, stand structure, simulation 7817
- *Fagus,* deciduous forests, synecology, increment 3906

Canopy *cont.*
- *Faidherbia albida,* soil properties, Malawi 8430
- forest trees
  - remote sensing, USA, reflectance, computer techniques 3525
  - stem form, growth rings, simulation 4209
- forests
  - precipitation, simulation 7679
  - remote sensing, radar, backscatter 7677
- *Fraxinus pennsylvanica,* remote sensing, atmosphere, energy relations, USA 1028
- increment, diameter, *Albizia lebbeck,* Australia 1821
- interception
  - *Acer rubrum,* air pollution, radionuclides, pot experimentation 8844
  - *Azadirachta indica,* throughfall, stemflow, India 706
  - *Picea rubens,* air pollution, radionuclides, pot experimentation 8844
  - *Quercus leucotrichophora,* throughfall, stemflow, India 706
  - *Rhododendron arboreum*
    - precipitation, cycling, India 10085
    - throughfall, stemflow, India 706
- leaching
  - coniferous forests, acid deposition, USA 8374
  - deciduous forests, acid deposition, USA 8374
- light, *Acer saccharum,* air pollution, photosynthesis, USA 9752
- *Lithocarpus densiflorus,* thinning, USA 4356
- *Nothofagus,* gas exchange, light, New Zealand, diurnal variation 4693
- *Parkia biglobosa*
  - soil fertility
    - mycorrhizas
      - Burkina Faso 10101
      - Nigeria 10101
- *Pentaspadon motleyi,* rain forests, natural regeneration, Peninsular Malaysia 8183
- *Picea abies*
  - air pollution, foliage, distribution, Czech Republic 7088
  - leaf area index, simulation 2512
  - precipitation, Belgium, leaching 4082
  - snow, evaporation, Sweden, measurement 2905
- *Picea glauca,* increment, light penetration, Canada 1757
- *Picea sitchensis,* spacing, air flow, UK 8014
- *Pinus elliottii,* foliage, remote sensing, USA 8732
- *Pinus monticola,* throughfall, USA 3690
- *Pinus palustris,* natural regeneration, USA 4324
- *Pinus pinaster*
  - forest plantations, precipitation, simulation, France 7679
  - light penetration, France, solar radiation, measurement 4469
  - precipitation
    - simulation, France 701
    - stemflow, throughfall, France 700
- *Pinus sylvestris*
  - foliage
    - measurement, insolation, Poland 3474
    - weight, insolation, Poland 3475
  - light
    - natural regeneration
      - Finland
        - seedling growth 9664
        - simulation 9664
  - radionuclides, fallout, caesium, Finland 1955
  - shoots, weight, insolation, Poland 3475
- *Populus,* light penetration, simulation 4213

Canopy *cont.*
- *Populus interamericana,* water uptake, transpiration, USA 1932
- *Prosopis laevigata,* precipitation, Mexico, simulation 2398
- *Pseudotsuga menziesii,* forest influences, air, Netherlands 2904
- *Quercus*
  - natural regeneration, understorey, USA 3118
  - solar radiation, USA, defoliation 3725
- *Quercus ilex,* stand structure, plant water relations, Spain 2840
- *Quercus pyrenaica,* leaf water potential, transpiration, Spain 1933
- rain forests
  - forest ecology, Tropics, research 536
  - methodology 8498
  - precipitation
    - erosion
      - Sabah 8012
      - simulation 8012
    - French Guiana 9765
    - wind, Australia, simulation 7123
  - seedlings, light, Australia 2798
- reflectance, broadleaves, UK, seasonal variation 6224
- remote sensing
  - plant physiology, Brazil 1032
  - reflectance, Luxembourg 1033
  - tropical forests, Ghana 9642
  - USA, estimation 6240
- solar radiation, measurement 26
- stand characteristics
  - surveying, *Pinus ponderosa,* measurement, techniques 4183
  - wind, simulation, air flow 3534
- stand structure
  - light penetration, estimation, techniques 9534
  - simulation 7817
- structure
  - deciduous forests, aerial photography, Japan 6221
  - *Pinus contorta,* light penetration, USA 3553
- tropical forests, light, leaf area index, Mexico 8756
- turbulent flow, deciduous forests, forest influences, atmosphere, Canada 9763
- *Vaccinium,* habit, Finland 8039
- wind damage, vegetation types, Puerto Rico 1074
- woody weeds, light penetration, Canada, control 1757

Canopy gaps
- *Abies amabilis,* plant colonization, Canada 542
- *Abies pinsapo,* stand characteristics, forest ecology, Spain 9024
- *Acer*
  - USA
    - growth, survival 7868
    - morphology, growth 4800
- broadleaves
  - light, crown, Mexico 7023
  - natural regeneration, Japan, botanical composition 9021
  - plant water relations, plant succession, Brazil 6576
  - transpiration, regulation, Panama 6302
- characteristics, tropical forests, Côte d'Ivoire 1334
- *Dacryodes excelsa,* snails, Puerto Rico 1474
- deciduous forests
  - natural regeneration, USA 8182
  - soil water, Japan 4485
- dynamics, simulation 9958
- elephants, *Loxodonta africana,* tropical forests, Gabon 684
- *Fagus crenata,* natural regeneration, Japan, seed production, seed dispersal 6104
- *Fagus sylvatica*
  - soil biology
    - Germany 7937
    - microorganisms, Germany 7936

- **Canopy gaps** *cont.*
  - *Fagus sylvatica cont.*
    - soil water balance, cycling, Germany 7950
  - forest trees
    - group fellings, plant succession, Germany 8607
    - growth, equations, methodology 27
  - insect pests, ecology, wind damage, Puerto Rico 3177
  - logging, tropical forests, French Guiana, mortality 9533
  - mixed forests, synecology, plant succession, USA 3101
  - natural regeneration, light intensity, rain forests, Costa Rica 1409
  - *Pinus ponderosa*
    - forest management, forest pests, USA 8986
    - stand structure
      - forest management, USA 8666
      - USA, analysis 8987
  - plant succession, seedlings, China 1395
  - rain forests
    - light penetration, Australia 3554
    - natural regeneration, New Zealand, population dynamics 1393
    - population dynamics, simulation, Panama 5466
    - understorey, Mexico 540
  - size, *Pinus contorta,* soil chemistry, USA 1143
  - subalpine forests, natural regeneration, Japan 6523
  - thematic mapper, wind damage, Brazil 3566
  - tropical forests, stand development, French Guiana 6570
- ***Canthium gilfillanii,*** foliage, chemistry, glucosides 9818
- **Cape Verde**
  - *Acacia*
    - defoliation, seasonal variation, soil salinity, wind damage 1883
    - species trials 1667
  - *Prosopis*
    - defoliation, seasonal variation, soil salinity, wind damage 1883
    - species trials 1667
  - *Prosopis juliflora,* shoot cuttings 1694
  - vegetation, flora, maps 9908-9909
- ***Capnodendron,*** fungal diseases, *Adansonia digitata,* plant disorders, Zimbabwe 7203
- ***Capparis aristiquetae,*** plant water relations, drought resistance, Venezuela 3594
- ***Capparis decidua,*** vegetation, reclamation, sodic soils, India 712
- ***Capparis spinosa,*** air pollution, foliage, damage, India 5328
- ***Capparis zeylanica,*** vegetation, reclamation, sodic soils, India 712
- ***Capra pyrenaica,*** goats, browse, Spain 10058
- ***Capreolus capreolus***
  - deer
    - *Abies alba,* natural regeneration, browsing damage, France 1740
    - broadleaves, browsing damage, France 1512
    - forest recreation, Germany 7537
    - Italy, biology, population dynamics 1517
    - salvage felling and logging, Norway 6694
- **Carabidae,** *Pinus sylvestris,* fertilizers, Poland 7416
- ***Caragana arborescens,*** taxonomy, plant morphology, habit, Poland 2115
- ***Caragana intermedia,*** site class assessment, China 9600
- ***Caragana korshinskii,*** site class assessment, China 9600
- ***Carapa guianensis,*** plant water relations, gas exchange, French Guiana 4506
- ***Carapa procera,*** bark, extractives, bioassays 6444
- **Carbon**
  - isotopes, dendrochronology, cellulose, extraction, techniques 8462
- **Carbon** *cont.*
  - storage, rotations, tax incentives, Canada 8546
- **Carbon balance**
  - forest trees, growth models, plant morphology, equations 9589
  - forestry, Finland, projections 9376
  - vegetation types, land use, Brazil, estimation 9734
- **Carbon cycle**
  - afforestation
    - agricultural land, subsidies, USA 5986
    - projects, forest influences, atmosphere, World 8013
  - agroforestry
    - deforestation, control, climatic change 3259
    - shifting cultivation, soil organic matter, Tropics, reviews 8427
  - atmosphere, forest influences, silviculture, Norway, simulation 2901
  - bamboos, *Phyllostachys bambusoides,* biomass production, Japan, simulation 4530
  - boreal forests
    - climate, Russia, simulation 328
    - climatic change, research projects, Canada 9943
    - forest fires, global warming 7275
    - mapping, Russia 1952
    - Russia 6449
  - broadleaved evergreen forests, ecotones, soil organic matter, India 1361
  - broadleaves, forest litter, soil organic matter, France, measurement 5240
  - Canada, simulation 3623
  - *Castanea sativa,* carbon dioxide enrichment 4464
  - coniferous forests, nitrogen cycle, Europe, simulation 9364
  - *Cryptomeria japonica,* forest influences, soil chemistry, Japan 7047
  - deciduous forests
    - biomass, North America 3481
    - deforestation, soil organic matter, Mexico 4529
    - UK, radiocarbon dating 4534
  - *Eucalyptus exserta,* nitrogen cycle, China, simulation 4211
  - *Fagus sylvatica*
    - Germany 323
    - soil biology, microorganisms, nitrogen cycle, Germany 7933
  - forest management, climatic change, carbon dioxide enrichment, research, reviews 4533
  - forest plantations
    - New Zealand 4597
    - UK 4315
  - forest policy, forest economics, afforestation, market economics 2780
  - forest products, Finland 5026
  - forest resources, valuation, Developing Countries 3686
  - forest trees
    - Canada 4490
    - simulation, Spain 2849
  - forestry
    - climatic change
      - global warming
        - Russia 9661
        - World 9661
  - forests
    - conferences 2478
    - greenhouse effect, carbon dioxide enrichment, international agreements 3341
    - India 2788
    - USA 7071
  - *Juglans regia,* seedlings, photosynthesis 1257
  - logging, site preparation, conferences 4175
  - mixed forests, forest influences, atmosphere, USA 5356
  - multipurpose trees, afforestation, waste land, soil organic matter, India 7561
- **Carbon cycle** *cont.*
  - *Picea abies*
    - clear felling, whole tree logging, simulation, Sweden 4535
    - forest influences, forest economics, peatlands, Norway 2784
  - *Picea sitchensis,* afforestation, peatlands, UK 2633
  - *Pinus,* stand characteristics, books 6797
  - *Pinus contorta,* respiration, stand development, USA 2851
  - *Pinus elliottii,* simulation, USA 3005
  - *Pinus ponderosa,* carbon dioxide enrichment, nitrogen fertilizers 5302
  - *Pinus radiata,* soil organic matter, podzolic soils, silviculture, Australia 4489
  - *Pinus sylvestris*
    - forest influences, forest economics, peatlands, Norway 2784
    - Germany 8866
  - pollen analysis, vegetation, history, Europe 2125
  - private forestry, forest management, simulation, USA 3630
  - respiration, deciduous forests, clear felling, USA 3592
  - Russia 4544
  - savannas, ecotones, soil organic matter, India 1361
  - simulation, data collection, boreal forests 1029
  - steppes, climate, Russia, simulation 328
  - tropical forests, root systems, plant water relations, Brazil 4085
  - urban forestry, air pollution, USA 4134
  - vegetation types, land use, Brazil, estimation 9735
- **Carbon dioxide**
  - atmosphere, *Salix herbacea,* stomata, density, palaeoclimatology 3538
  - conifers, shoots, structure, photosynthesis, light 8109
- **Carbon dioxide enrichment**
  - *Acer pseudoplatanus,* forest litter, decomposition, laboratory tests 5255
  - *Acer saccharum,* gas exchange 2080
  - air pollution, ozone, seedling growth 2874
  - *Alnus glutinosa,* nitrogen fixation 4527
  - *Alnus rubra,* seedlings, drought 7190
  - *Betula pendula*
    - biomass production, plant nutrition 7862
    - forest litter, decomposition, plant nutrition, nitrogen 7900
    - plant nutrition, plant composition, secondary metabolites, carbohydrates 4665
    - temperature, seedling growth, photosynthesis, transpiration 2997
  - *Betula pubescens,* biomass 3537
  - biomass production, simulation, nutrient availability 1057
  - boreal forests
    - Canada, conservation, management 9942
    - Norway 5229
  - broadleaves
    - drought, plant physiology, USA 5406
    - foliage, stomata, density, Italy 2048
    - heat stress, plant nutrition, interactions 3547
    - light, plant succession, USA 3099
    - seedlings, phenology, temperature, soil fertility 7864
  - carbon cycle, forest management, climatic change, research, reviews 4533
  - *Castanea sativa*
    - carbon cycle 4464
    - nitrogen cycle 4464
    - NPK fertilizers, gas exchange, interactions 2069
  - climatic change, gas exchange, metabolism 5225
  - conifers, temperature, plant physiology, simulation, measurement 1609
  - control, tropical forests, planting, logging, Sabah 6254

Carbon dioxide enrichment *cont.*
- *Erica arborea*
  - plant composition, Italy 7031
  - plant physiology, Italy 7031
- *Eucalyptus camaldulensis,* foliage, tissue culture, growth, anatomy 7741
- *Eucalyptus grandis*
  - photosynthesis, transpiration 2086
  - plant nutrition 269
- *Eucalyptus tetrodonta*
  - photosynthesis, light, temperature, vapour pressure 8937
  - seedlings, stomata, leaf conductance 3597
- *Fagus grandifolia,* gas exchange 2080
- *Fagus sylvatica*
  - foliage, plant water relations 1882
  - photosynthesis, foliage, pH 2084
- fertilizers, lime, Germany 9766
- forest fires, Portugal, forecasting 3540
- forest influences 1990
  - energy resources, reviews 7130
  - Switzerland 355
- forest trees
  - air pollution, ozone, foliage, optical properties 9749
  - habit, simulation 7863
  - phloem, carbohydrates, translocation 7178
  - photosynthesis, acclimatization 1283
  - plant physiology, France, drought 4473
  - roots
    - methodology 6423
    - plant water relations, plant nutrition 9670
    - soil biology, simulation 6263
  - simulation, growth 2697
- forests, carbon cycle, greenhouse effect, international agreements 3341
- *Fraxinus excelsior,* forest litter, decomposition, laboratory tests 5255
- global warming, nitrogen cycle, ecosystems, change 4467
- insect pests
  - *Lymantria dispar*
    - *Betula papyrifera,* plant composition 5711
    - *Pinus strobus,* plant composition 5711
- *Maranthes corymbosa*
  - seedlings
    - photosynthesis 1266
    - stomata, leaf conductance 3597
- mycorrhizas
  - *Laccaria laccata, Quercus robur* 5582
  - *Pisolithus tinctorius*
    - *Pinus sylvestris* 7390
    - *Pinus taeda,* phosphorus 6619
- *Picea abies*
  - air pollution, ozone, chromosome aberrations 4836
  - gas exchange, enzymes 2082
  - photosynthesis, foliage, pH 2084
  - plant physiology, enzymes, carbon, metabolism 459
  - temperature, seedling growth, photosynthesis, transpiration 2997
- *Picea rubens,* photosynthesis, seedling growth, plant water relations, soil fertility 1293
- *Picea sitchensis*
  - buds, phenology, temperature, UK 2008
  - forest litter
    - decomposition
      - laboratory tests 5255
      - plant nutrition, nitrogen 7900
  - plant water relations, water stress, plant nutrition, seedling growth 8106
- *Pinus cembra,* dendrochronology, Austria 6764
- *Pinus eldarica*
  - biomass, USA 3485
  - photosynthesis
    - USA 5226
      - growth 3003
- *Pinus pinaster,* water stress, transpiration, interactions 1928

Carbon dioxide enrichment *cont.*
- *Pinus ponderosa*
  - biomass, photosynthesis, USA 1878
  - nitrogen fertilizers, carbon cycle 5302
  - seedling growth
    - gas exchange, temperature 3552
    - nutrient deficiencies, nitrogen 7967
- *Pinus radiata,* plant nutrition 269
- *Pinus sylvestris*
  - climatic change, photosynthesis, Finland 7861
  - nitrogen cycle, ammonia 1966
  - soil biology, Finland 7935
- *Pinus taeda*
  - gas exchange, USA, adaptation 8752
  - photosynthesis
    - nutrient deficiencies 1881
    - plant nutrition, phosphorus 4696
  - plant physiology, USA 7024
  - roots, morphology, nitrogen 6432
  - ultraviolet radiation, photosynthesis 2806
- *Populus,* biomass production, photosynthesis, Belgium 8112
- *Populus canadensis,* soil fertility, USA 5228
- *Populus eugenei,* roots, nitrogen cycle 7191
- *Populus grandidentata*
  - cycling, USA 3548
  - roots, growth, nitrogen 6433
- *Populus* 'Primo', growth, plant physiology 8755
- *Prunus avium,* plant physiology, chloroplasts, biochemistry, growth 1879
- *Pseudotsuga menziesii,* plant physiology 4474
- *Quercus*
  - dendrochronology, climate, France, simulation 4466
  - plant composition, photosynthesis, Italy 4465
- *Quercus alba,* stems, respiration 6475
- *Quercus petraea*
  - photosynthesis, photosystem II, interactions 2070
  - water stress, transpiration, interactions 1928
- *Quercus robur,* gas exchange, photosynthesis, growth 6470
- rain forests, clearing, forest fires, Brazil 9776
- roots, vegetation, synecology, books, conferences 6798
- silkworms, Saturniidae, *Betula papyrifera,* food plants 8683
- soil biology, air pollution, reviews 6295
- woody plants, plant physiology, reviews 2800

Cardiaspina albitextura, insect pests, *Eucalyptus,* provenance, Australia, resistance 4031

Cardiaspina fiscella, insect pests, *Eucalyptus,* Australia, control 9138

Cardiaspina maniformis, insect pests, *Eucalyptus,* Australia, control 9138

Cardiaspina retator, insect pests, *Eucalyptus,* provenance, Australia, resistance 4031

Cardwellia sublimis, afforestation, mixtures, degraded land, reclamation, Australia 3233

Careers (*see* Education; Training)

Caribbean
- agroforestry, economics, development projects 10098
- farm forestry, economics, development projects 10098
- mangrove forests, climatic change, peat, formation 6270
- medicinal plants, antioxidant properties 6954
- *Pinus caribaea,* forest plantations, research 953
- wind damage 1065
  - cycling 1072
  - natural regeneration 1082

Cariniana estrellensis, endangered species, Paraguay 1577

Cariniana micrantha, monkeys, *Cebus apella,* seed predation, Brazil 474

Cariniana pyriformis
- grafting, Colombia 879
- shoot cuttings, Colombia 879

Carissa carandas, air layering, India 114

Carmenta foraseminis, insect pests, *Gustavia superba,* seeds, Panama 7458

Carpinus, wood chemistry, extractives, chemotaxonomy 4664

Carpinus betulus
- cycling, calcium, Belgium, leaching 3624
- deciduous forests, Romania 3926
- degraded forests, synecology, national parks, Poland 2140
- foliage
  - enzymes, isoenzymes, seasonal variation, UK 3770
  - leaching, precipitation 7089
- forest decline, France 3817
- forest influences, atmosphere, Austria, volatile compounds 8015
- forest litter
  - cycling, Sweden 2820
  - decomposition
    - nutrients, heavy metals, Sweden 9700
    - Poland, chemistry 7901
- forests, plant succession, Poland 1396
- ground vegetation, plant succession, Poland 3943
- mined land, Germany, clay soils 1538
- mixed forests, understorey, quality, Poland 1816
- natural regeneration
  - Germany, silvicultural conversion 4322
  - stand characteristics, botanical composition, climatic change, Poland 7330
  - stand structure, botanical composition, development, Poland 7329
- palaeoecology, plant succession, Greece 8989
- phenology, Slovakia 7144
- plant nutrition 2850
- soil biology, algae, Ukraine, forest steppe 1106
- soil pH, soil organic matter, Sweden 2816
- taxonomy, plant morphology, habit, Poland 2114-2115
- ungulates, forest management, national parks, Poland 4058
- vegetation types, Czech Republic 4776
- wood properties, wood anatomy, methodology, boring 2494

Carpinus caroliniana
- bottomland forests, dead trees, USA, birds, feeding behaviour 6680
- control, woody weeds, herbicides, USA 1766
- pollen analysis, palaeoecology, USA 3888

Carpinus cordata, reproductive behaviour, seeds, seedlings, Japan, old-growth forests 7211

Carpinus japonica, reproductive behaviour, seeds, seedlings, Japan, old-growth forests 7211

Carpinus laxiflora
- genetic variation, isoenzymes, Japan 2203
- reproductive behaviour, seeds, seedlings, Japan, old-growth forests 7211
- wood anatomy, Japan, growth effects 7115

Carpinus orientalis
- insect pests, *Tortrix viridana,* Ukraine, parasitoids, *Trichogramma telengai* 1484
- palaeoecology, plant succession, Greece 8989

Carpinus tschonoskii, reproductive behaviour, seeds, seedlings, Japan, old-growth forests 7211

Carpinus turczaninowii, embryology, taxonomy 2054

Carya
- control, woody weeds, herbicides, USA 1766

***Carya** cont.*
  logging, damage, soil density, USA 2895
  salamanders, clear felling, USA, population dynamics 3195
  understorey, plant succession, USA, botanical composition 4783
Carya illinoinensis
  dendrochronology, growth rings 9313
  forest plantations, weed control, herbicides, USA 172
  remote sensing, radiometry, reflectance, USA 7842
  street trees, microclimate, noise abatement, China 10156
  tissue culture, somatic embryogenesis 118
Carya tomentosa
  control, woody weeds, herbicides, USA 1767
  foliage, optical properties 7032
  natural regeneration, USA 3107
  plant physiology, drought, USA, plant ecological groups 8813
  plant succession, old fields, site requirements 3102
  seedlings, plant competition, North America, growth 3058
Caryedon serratus
  insect pests
    Acacia, chemical control 5781
    Acacia tortilis, Pakistan, seeds 5679
    Tamarindus indica
      chemical control 5781
      India, biology 2341
Caryocar brasiliense
  cerrado, edible species, Brazil, reviews 8038
  insect pests, *Atta sexdens rubropilosa*, Brazil 7489
Caryodaphnopsis tonkinensis, bark, benzofurans 8085
Cassia, root nodules, surveys 2235
Cassia abbreviata, medicinal plants, Tanzania, plant composition 9565
Cassia fistula
  air pollution, India, growth, plant physiology 2869
  fungal diseases, Pakistan, seeds 2257
  seed germination, seed treatment, India 858
  seed treatment, seed germination, seedling growth 2560
Cassia grandis, species trials, reclamation, mined land, Cuba 1540
Cassia renigera, spacing, biomass production, India 1779
Cassia siamea
  agroforestry
    green manures
      decomposition
        Kenya 5874
        nutrients, Togo 8422
    plant competition, Togo 7573
    pruning trash, decomposition, precipitation, Nigeria 8434
  farm forestry, soil fertility, India 2902
  forest nurseries, irrigation, waste water, Niger 9473
  forest plantations, Indonesia 930
  fuel plantations, irrigated stands, stand density, increment, Kenya 6131
  parasitic plants, *Santalum album*, increment, India 186
  phosphorus fertilizers, plant nutrition, nitrogen, Nigeria 9724
  plant morphology, meiosis, India, variation 4650
  planting, nitrogen-phosphorus fertilizers, soil degradation, India 8627
  pruning, plant nutrition, Nigeria 5153
  reclamation
    mined land
      India, economics 3248
      species trials, India 3246
  seed production, seed germination, India 4268
  short rotation forestry, biomass production, India 1736
  spacing, biomass production, India 1779
***Cassia siamea** cont.*
  species trials
    agroforestry, acid soils, Cameroon 2542
    fuel plantations, Nepal 6865
    India 1664
    Zaire 8566
  underplanting, *Daemonorops pericanthus*, seedling growth, tillage, Indonesia 6149
Cassia sieberiana, seed germination, seed treatment 84
Cassia spectabilis
  agroforestry, nitrogen fixation, Philippines 4115
  green manures, decomposition, agroforestry, Philippines 2418
  phosphorus fertilizers, plant nutrition, nitrogen, Nigeria 9724
  pruning, plant nutrition, Nigeria 5153
Cassia surattensis, seedling growth, seeds, pollution, vehicles, Pakistan 10155
Cassinopsis, bark, taxonomy, anatomy 399
Cassipourea, mangroves, epidermis, morphology, taxonomy, Nigeria 3724
Castanea crenata
  crown, Japan, branches, development, morphology 9795
  genetic variation, isoenzymes, taxonomy, identification 2217
  species trials, forest plantations, grazing, France 5884
  stem form, snow, Japan, resistance 2954
Castanea dentata
  fungal diseases
    Cryphonectria parasitica
      enzyme activity 9109
      hypovirulence 9110
      North America 9108
      USA 8302
        hypovirulence 6635
  genetic variation
    isoenzymes 592
      taxonomy, identification 2217
  seedlings, plant competition, North America, growth 3058
  understorey, plant succession, USA, botanical composition 4783
Castanea dentata × Castanea mollissima, plant morphology, genetics, inheritance 5545
Castanea mollissima
  fungal diseases, *Cryphonectria parasitica*, enzyme activity 9109
  genetic resources, China 2218
  genetic variation, isoenzymes 592
Castanea sativa
  agroforestry
    coppice, management, France 5877
    Corsica 5883
  air pollution, sulfur dioxide, salt injury, Europe 3644
  bark, chemistry, esters 1253
  carbon dioxide enrichment
    carbon cycle 4464
    nitrogen cycle 4464
    NPK fertilizers, gas exchange, interactions 2069
  coppice
    biomass production, France, equations 4398
    France, research, growth, ecology 8614
    Italy, research 8616
    plant succession, France 4317
    Portugal, forest resources 8612
    stand characteristics, logging, Italy, temporal variation 8611
    stand structure, Italy 9535
  degraded forests, reclamation, Albania 6707
  foliage, shedding, enzymes 3776
  forest decline, France 3817
  forest litter
    decomposition
      chemical composition 295
      Spain 9699
  forest resources, silviculture, Italy 3465
  fruits, chemistry, esters 1253
***Castanea sativa** cont.*
  fungal diseases
    Cryphonectria parasitica
      aerial photography, Switzerland 7854
      biological control
        Europe 7412
        Italy, hypovirulence 9126
        Slovakia 8321
      Germany 5648
      Italy, grafting 6634
    Phytophthora, tissue culture, resistance 6892
    Switzerland 184
      coppice, fungi 5617
  gas exchange, assimilation 4690
  genetic variation
    evolution, Europe 1437
    isoenzymes, taxonomy, identification 2217
  insect pests
    Curculio elephas, France, ecology 2349
    Switzerland 184
  recalcitrant seeds, chemistry, proteins 3832
  seedlings, sap flow, measurement 3618
  silviculture, UK 6943
  species trials, forest plantations, grazing, France 5884
  stand structure, basal area, drainage, soil properties, Spain 9574
  street trees, tree injection, nutrients, soil air, UK 10143
  Switzerland, reviews 184
  vegetation, surveys, soil types, Italy 303
  wood chemistry
    age, tannins 8089
    esters 1253
Castanea sativa × Castanea crenata
  buds, phenolic compounds 2970
  in vitro culture, cold storage 8580
Castanea seguinii, genetic variation, isoenzymes 592
Castanopsis borneensis, mycorrhizas, Taiwan 3158
Castanopsis cuspidata
  canopy gaps, natural regeneration, Japan, botanical composition 9021
  crown, Japan, branches, development, morphology 9795
  reclaimed land, marine sediments, Japan, stand development 6703
  reproductive behaviour, production 9885
  seed dispersal, stand characteristics, Japan 9960
  stems, growth models 1820
Castanopsis indica
  stand characteristics, stand structure, biomass production, India 1410
  wood anatomy 403
Castanopsis tribuloides
  stand characteristics, stand structure, biomass production, India 1410
  wood anatomy 403
Castanospermum australe, rain forests, seeds, survival, predation, Australia 4050
Castanospora alphandii, rain forests, seeds, survival, predation, Australia 4050
Castor canadensis
  wildlife
    Canada, animal behaviour 4904
    USA, management, economics 8361
Castor fiber
  mammals, broadleaves, Germany 6674
  rodents, plant succession, Netherlands, foraging 2386
  wildlife, Croatia, habitats 4926
Casuarina
  agroforestry, India 3272
  insect pests, *Rhyparida limbatipennis*, forest decline, Australia 7204
  multipurpose trees, books 2448
  provenance trials, China 5941
  reclamation, mined land, Venezuela 6711
  root nodules, *Frankia*, enzyme activity 2227
  species trials
    China 5941

Casuarina *cont.*
- species trials *cont.*
  - saline soils, reclamation, Pakistan 6014
- vegetation
  - history
    - groundwater, Australia 2126
    - soil salinity, Australia 2126
- vegetation types, remote sensing, image processing, Australia 2763

Casuarina collina, geographical distribution, site factors, plant nutrition, New Caledonia 8887

Casuarina cristata, tree guards, seedling growth, Australia 5129

Casuarina cunninghamiana
- agroforestry, Australia 6729
- epidermis, crystals, calcium oxalate 5382
- growth models, Central America 219
- insect pests, *Rhyparida limbatipennis,* forest decline, Australia 7204
- plant nutrition, growth 5298
- provenance trials, drought resistance, soil fertility, Israel 6013
- reclamation, species trials, saline soils, Australia 7715
- root nodules
  - *Frankia* 6622
    - nitrogen fixation 2230
    - seedling growth, soil types, phosphorus fertilizers 6904
    - silt loam soils, New Zealand 3160
    - Uruguay, nitrogenase 1443
  - plant growth regulators 5588
- species trials
  - reclamation
    - desert soils, Egypt 3372
    - fly ash, India 9248
  - salt tolerance, Australia, survival, growth 5052
- stems, nodulation, nitrogen fixation, Réunion 2238
- symbiosis, *Frankia,* nitrogen fixation, trials 2232

Casuarina cunninghamiana* × *Casuarina glauca, symbiosis, *Frankia,* nitrogen fixation, trials 2232

Casuarina equisetifolia
- afforestation, reclaimed land, Singapore 4095
- allelopathy 7317
  - crops 545
- epidermis, crystals, calcium oxalate 5382
- farm forestry, soil fertility, India 2902
- forest litter, Senegal, measurement 6283
- forest plantations
  - canopy, acid deposition, nitrogen, India 5310
  - forest influences, soil chemistry, lateritic soils, India 8023
  - nitrogen cycle, India 4531
  - sand dune stabilization, Senegal 4939
  - soil chemistry, nitrogen, India 356
- fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
- fuelwood, India, calorific value 3361
- mycorrhizas
  - *Glomus* 5600
    - forest plantations, age, India 6617
    - seedling growth, India 3153
  - *Glomus fasciculatum,* roots, colonization 4011
  - *Pisolithus* 5610
  - rhizosphere, India 3157
  - *Sclerocystis rubiformis,* seedling growth, India 3153
  - *Scleroderma* 5610
  - seedling growth 4851
- nitrogen fixation, soil water, India 3154
- nutrient deficiencies, fertilizers, requirements 3628
- plant nutrition
  - growth 5298
  - plant competition, nitrogen fixation 6307
- planting stock, seedlings, NPK fertilizers, India 1721
- root nodules
  - *Frankia* 6622
    - roots, colonization 4011

Casuarina equisetifolia *cont.*
- root nodules *cont.*
  - *Frankia cont.*
    - seedlings, inoculation, testing 6624
    - Uruguay, nitrogenase 1443
    - USA 4848
  - nitrogen cycle, India 5568
- roots, development, morphology, plant nutrition, phosphorus 2941
- seedling growth, biofertilizers, Puerto Rico 1713
- shelterbelts, irrigation, saline water 1534
- shoot cuttings, India 103, 3400
- social forestry, forest economics, India 10119
- spacing, biomass production, India 1779
- species trials
  - mangrove forests, Bangladesh 6017
  - reclamation, mined land, Cuba 1540
  - shelterbelts, irrigation, saline water, Saudi Arabia 2559
- symbiosis, *Frankia,* nitrogen fixation, trials 2232
- wood anatomy 414

Casuarina glauca
- gene expression, symbiosis 7376
- genetic transformation, roots, morphology, root nodules, *Frankia* 9994
- plant nutrition, growth 5298
- provenance trials, drought resistance, soil fertility, Israel 6013
- reclamation, species trials, saline soils, Australia 7715
- root nodules
  - *Frankia* 6622
    - genetic transformation, roots, morphology 9994
    - silt loam soils, New Zealand 3160
- shoot cuttings, India 3400
- species trials
  - salt tolerance
    - Australia
      - growth 5052
      - survival 5052
- symbiosis, *Frankia,* nitrogen fixation, trials 2232
- tree breeding, clones, salt tolerance, waterlogging, Australia 3138

Casuarina littoralis, agroforestry, species trials, Rwanda 4961

Casuarina obesa
- plant nutrition, growth 5298
- reclamation, species trials, saline soils, Australia 7715
- tree breeding, clones, salt tolerance, waterlogging, Australia 3138

Casuarina pauper, seed banks, Australia 7324

Casuarinaceae, palaeoecology, Australia 3885

Catalpa, plant parasitic nematodes, *Meloidogyne,* control 2384

Catalpa longissima
- agroforestry, Haiti 1563
- forest nurseries, growing media, Dominican Republic 6088

Catchment areas (*see* Watersheds)

Catha edulis, tissue culture, micropropagation, metabolites, alkaloids 3469

Cattle
- damage, forest plantations, protection, trenching, India 681
- rain forests, agroforestry, synecology, Mexico 6736

Cavanillesia platanifolia, secondary forests, phenology, forest litter, Colombia 1205

Cavitation, sap flow, theory 7065

Cavities in trees
- birds
  - *Aix sponsa,* USA, nesting 6686
  - forest management, reviews 1526
  - *Picoides borealis, Pinus palustris,* USA 4070
  - sclerophyllous forests, Australia 6692
- *Eucalyptus,* stems, mechanics, breakage, Australia 5372
- forest trees, stems, mechanics, breakage 5372

Cavities in trees *cont.*
- wildlife
  - birds
    - clear felling, Sweden 6690
    - statistical analysis, simulation 2509

Ceanothus americanus, root nodules, histology 5586

Ceanothus thyrsiflorus, plant water relations, stomatal resistance, abscisic acid, USA 2083

Ceanothus velutinus, forest influences, soil chemistry, USA 8780

Cebus apella, monkeys, *Cariniana micrantha,* seed predation, Brazil 474

Cecidomyiidae, insect pests, *Quercus cerris,* Austria, galls 5770

Cecropia glazioui, wood anatomy, pollution, Brazil 6325

Cecropia insignis, canopy gaps, transpiration, regulation, Panama 6302

Cecropia latiloba, fruits, fishes 9233

Cecropia obtusa
- crown, morphology 404
- photosynthesis, soil fertility, Guyana 7193
- root systems
  - morphology 404
    - development 7164

Cecropia obtusifolia
- canopy gaps, transpiration, regulation, Panama 6302
- foliage, anatomy, light intensity, photosynthesis 3731
- hydraulic conductivity, roots 310
- population genetics, isoenzymes, Mexico 5538
- sap flow, Panama, equipment 6298
- seed dispersal, Mexico, opossums 6506
- seedlings, light, canopy gaps, crown, Mexico 7023
- tropical forests, light, plant physiology 6259
- ultraviolet radiation, plant physiology, Panama 6257
- wood anatomy 4630

Cecropia tessmanii, symbiosis, Formicidae, plant morphology, plant nutrition 3716

Cedestis subfasciella, insect pests, *Pinus,* Spain, biology, damage 8332

Cedrela fissilis
- endangered species, Paraguay 1577
- flora, Brazil 7245

Cedrela mexicana (*see Cedrela odorata*)

Cedrela odorata
- breeding programmes, Cuba 1434
- flora, Brazil 7245
- genetic variation, geographical distribution, genetic markers 5528
- increment, light, Peru, simulation 6167
- insect pests
  - *Hypsipyla grandella*
    - Costa Rica, nutrient reserves, starch 6654
    - Cuba, damage 1483
- plant parasitic nematodes, *Meloidogyne,* shade trees, crops, Cuba 1496
- rain forests, Mexico, wood anatomy 1211
- secondary forests, selective felling, planning, sustainability, Venezuela 5122
- shoot cuttings 2577
- understorey, plant competition, Costa Rica 6559

Cedrela salvadorensis, foliage, Costa Rica, flavonols 9828

Cedrela serrata, agroforestry, species trials, Rwanda 4961

Cedrela toona (*see Toona ciliata*)

Cedrus
- geographical distribution
  - Asia 7262
  - Europe 7262
- wood anatomy, parenchyma 4625

Cedrus atlantica
- bark, chemistry, esters 1253
- grafting, provenance, Italy 9449
- mycorrhizas, forest nurseries, afforestation, France, plant nutrition 5576
- wood chemistry, esters 1253

Cedrus deodara
- forest plantations, site class assessment, statistical analysis, Argentina 225
- forests
  - soil biology, forest litter, respiration, India 6294
  - soil types, mollisols, ultisols, India 7052
  - synecology, stand structure, natural regeneration, India 2167
- India, books 2454
- mixed forests, synecology, topography, India 7269
- soil chemistry, humic acids, soil fertility, India 286
- street trees, microclimate, noise abatement, China 10156

Ceiba pentandra
- farm forestry, soil fertility, India 2902
- photosynthesis, plant water relations, Panama, carbon 4697
- rain forests, Mexico, wood anatomy 1211
- wood anatomy, wood properties 6428

Celaenodendron mexicanum, tropical forests, species diversity, Mexico 2146

Cell culture, *Acer pseudoplatanus,* respiration, nutrient deficiencies, iron 461

Cell differentiation, *Calotropis procera,* laticifers 7162

Cell division, *Pinus taeda,* apical meristems, methodology 780

Cell growth, ultrastructure, *Picea abies,* ethylene, peroxidases 8108

Cell walls
- *Cryptomeria japonica,* differentiation, polysaccharides 7173
- *Fraxinus mandshurica,* wood anatomy, fibres, reaction wood 6412
- growth stress
  - *Cryptomeria japonica* 1177
  - *Liriodendron tulipifera* 1177
- hardwoods, lignin, biosynthesis, peroxidases 1246
- *Picea sitchensis,* callus, grafting 2043
- *Populus* 'I-214', lignification 1233
- structure, mechanics, toughness, woody plants 8049
- turgor, *Pinus pinaster,* roots, growth, water stress 7942

Cellular biology, tissue culture, cell suspensions, conifers 5945

Cellulose
- extraction, dendrochronology, carbon, isotopes, techniques 8462
- lignin, hemicelluloses, affinity 1245
- metabolism, *Quercus robur,* earlywood, latewood, UK 9853

Celtis africana, vegetation types, forests, synecology, South Africa 5451

Celtis australis
- fodder, choice of species, Nepal 6948
- forest nurseries
  - Nepal, planting stock, production costs 9480
  - techniques, India 5114
- insect pests, *Diorhabda lusca,* India, damage 1488
- mites, *Aceria bezzii,* Italy, buds, damage 668
- seed weight, seedling growth, nitrogen fertilizers, India 141

Celtis laevigata, species trials, USA 68

Celtis latifolia, stem form, buttresses, plant competition, Papua New Guinea 3876

Celtis occidentalis, roots, girdling, wire 1981

Celtis paniculata, veteran or remarkable trees, Australia 6857

Celtis sinensis
- insect pests, Hemiptera, USA, control 5783
- roadside plantations, forest influences, air pollution, Japan 7126

Celtis spinosa, phenology, climate, Argentina 1210

Cenangium ferruginosum, fungal diseases, conifers 4169

Cenococcum geophilum
- mycorrhizas
  - forest trees, chemistry 8274
  - *Picea abies*
    - enzymes 9993

Cenococcum geophilum *cont.*
- mycorrhizas *cont.*
  - *Picea abies cont.*
    - protoplasts 9073
    - seedlings, enzymes 7393
  - *Pinus,* radionuclides, uptake 4007
  - *Pinus contorta,* competition 8271
  - *Pinus sylvestris,* seedlings, nitrogen fertilizers 7392
  - *Pseudotsuga menziesii,* forest litter, decomposition 4005
- *Picea abies,* fertilizers, lime, mycorrhizas, acid soils, Finland 3162

Central Africa
- *Croton,* essential oils, volatile compounds 9802
- rain forests, forest management, bibliographies 6794

Central African Republic
- essential oils, *Guarea cedrata,* bark 6439
- tropical forests, forest management, sustainability 8720

Central America
- *Acacia mangium,* genetic resources 1438
- agroforestry
  - development projects, databases 10109
  - economics, development projects 10098
- *Caesalpinia velutina,* growth models 220
- *Casuarina cunninghamiana,* growth models 219
- *Cordia alliodora,* population genetics, genetic variation, isoenzymes 6597
- deforestation, land use, cattle farming 8416
- farm forestry, economics, development projects 10098
- forest pests, books 4146-4147
- *Gmelina arborea,* growth models 221
- *Leucaena leucocephala,* genetic variation, isoenzymes 590
- mangrove forests, vegetation types 6548
- *Zygia,* taxonomy, new species 8967

Central Europe
- forest administration, organizations 9660
- forest decline, air pollution, climate 8946
- forest economics, forest policy 2770
- forest management, soil pH 287
- wildlife, forest management 4913

Centronia pulchra, cloud forests, clear felling, plant succession, Venezuela 5458

Cephalcia, insect pests, *Picea abies,* Italy 9174

Cephalcia abietis, insect pests, *Picea abies,* Poland, chemical control 7499

Cephalcia arvensis
- insect pests
  - *Picea abies*
    - Italy 9174
      - biological control, by nematodes 5804
      - damage 4043
      - population dynamics 6663

Cephalcia falleni, insect pests, *Picea abies,* Poland, chemical control 7499

Cephalcia fallenii, insect pests, *Picea abies,* Poland 7488

Cephalcia isshikii, insect pests, *Picea jezoensis,* Japan, damage, biology 4894

Cephalocereus lanuginosus, phenology, flowering, fruiting, Venezuela 5368

Cephalomappa beccariana, seeds, fatty acids, triacylglycerols 2974

Cephalotaxaceae, wood anatomy, identification 8066

Cephisus siccifolius, insect pests, Argentina 2301

Cerambycidae
- insect pests
  - *Heritiera utilis,* Africa, damage, surveys 10030
  - *Pinus sylvestris,* Norway, distribution 2350

Ceratocystiopsis minima, fungal diseases, *Pinus,* Cuba 1458

Ceratocystis
- fungal diseases
  - *Quercus robur,* Poland, forest decline, control 1299
- taxonomy 2264

Ceratocystis bicolor, fungal diseases, *Pinus caribaea,* Cuba 1458

Ceratocystis brunneo-crinita
- fungal diseases
  - *Pinus,* Cuba 1458
  - *Pinus caribaea,* Cuba 1458

Ceratocystis fagacearum
- fungal diseases
  - *Quercus*
    - Europe, spread 8299
    - USA 1459
      - control 3170
      - resistance 4862
  - *Quercus virginiana*
    - tree breeding, USA 1457
    - USA, control 4877

Ceratocystis fimbriata
- fungal diseases
  - *Platanus*
    - Europe, spread 8299
    - street trees, Europe 5646
  - *Platanus acerifolia*
    - histology, defence mechanisms 2268
    - seedlings, histochemistry 2275
  - *Populus,* clones, disease resistance, plant physiology 7404
- *Platanus occidentalis,* foliage, infection 5651

Ceratocystis moniliformis, fungal diseases, *Pinus caribaea,* Cuba 1458

Ceratocystis ulmi (*see Ophiostoma ulmi*)

Ceratonia siliqua
- forest plantations
  - establishment, mortality, seasonal variation, Spain 1746
  - height, increment, climate, Spain 1826
- insect pests, *Tribolium castaneum,* chemical control 5781

Ceratopetalum apetalum, sap flow, Australia, measurement 6300

Ceratopetalum virchowii, adventitious roots, stemflow, nutrients, Australia 391

Ceratosolen galili, insects, *Ficus sycomorus,* Southern Africa, ecology 620

Ceratozamia hildae, tissue culture, somatic embryogenesis 5101

Ceratozamia mexicana, somatic embryogenesis, histology 7748

Cercidium, foliage, anatomy, taxonomy 8067

Cercidium australe
- pollination
  - Apidae, Argentina, landscape ecology 1470
  - Argentina, forest ecology, fragmentation 4954

Cercidium floridum, seed production, USA 7214

Cercidium microphyllum
- flowering, phenology, USA 3030
- seed production, USA 7214

Cercis
- plant parasitic nematodes, *Meloidogyne,* susceptibility 5773
- root nodules, surveys 2235

Cercis canadensis
- cuticle, transpiration 5371
- fungal diseases, *Verticillium dahliae,* susceptibility 2265
- mulching, cover crops, USA 5113
- reclamation, mined land, tillage, USA 4093
- seed anatomy, dormancy 6396
- tissue culture, ovule culture, somatic embryogenesis, plant composition, proteins 5085
- water stress, genotype environment interaction, adaptation, USA 2206
- weed control, USA, herbicides 8644

Cercis chinensis, fungal diseases, *Verticillium dahliae,* susceptibility 2265

Cercis siliquastrum
- genetic variation, population genetics, seeds, proteins 5549
- seed development
  - biochemistry 6421
  - ultrastructure 2055

Cercis yunnanensis, fungal diseases, *Verticillium dahliae,* susceptibility 2265

- ***Cercocarpus betuloides,*** root nodules, inoculation 4841
- ***Cercocarpus traskiae,*** molecular genetics, endangered species, USA 5518
- ***Cercopithecus aethiops,*** monkeys, seed dispersal, forests, reclamation, South Africa 3211
- ***Cercospora megaspermae,*** fungal diseases, *Pistacia integerrima,* India, foliage 3168
- ***Ceriops,*** afforestation, erosion control, India 3225
- ***Ceriops decandra***
  - mangroves, foliage, pigments, seasonal variation, India 4675
  - natural regeneration, crabs, Bangladesh 7257
- ***Ceriops tagal***
  - adaptation, foliage, anatomy, chlorophyll, India 9790
  - foliage, light, Australia, phenolic compounds 434
  - mangrove forests
    - remote sensing, synecology, India 6996
    - seedlings, survival, environmental factors 5128
  - mangroves, foliage, Kenya, chemistry 4676
- ***Certhia familiaris,*** birds, boreal forests, fragmentation, ecology, Finland 1522
- **Certification,** forest management, sustainability, USA 5039
- ***Cervus dama,*** deer, *Pinus sylvestris,* Poland, damage, assessment 4049
- ***Cervus elaphus***
  - deer
    - *Abies alba,* natural regeneration, browsing damage, France 1740
    - broadleaves
      - browse, New Zealand 9226
      - France, ecology, stand characteristics 7538
    - browsing, *Nothofagus solandri,* New Zealand 4051
    - browsing damage, sclerophyllous scrub, Corsica 7525
    - *Pinus sylvestris,* grazing effects, forest ecology, UK 2392
    - USA, forest fires, feeding behaviour 3200
- ***Cervus nippon,*** deer, *Fagus crenata,* natural regeneration, Japan, browsing damage 4054
- ***Cervus unicolor***
  - deer
    - broadleaves
      - browse, New Zealand 9226
      - drought, India, damage 2844
- ***Chaetocarpus castanocarpus,*** wood anatomy 414
- ***Chaitophorus,*** insect pests, *Populus,* interactions, Formicidae 5754
- ***Chamaecrista chamaecristoides,*** seed dormancy, temperature, moisture, Mexico 2575
- ***Chamaecyparis***
  - insect pests, *Phloeosinus,* Austria 9167
  - palaeobotany, Canada 6527
- ***Chamaecyparis formosensis,*** isoenzymes, population genetics, Taiwan 4835
- ***Chamaecyparis lawsoniana***
  - foliage, chemistry, chlorinated hydrocarbons, measurement 9334
  - forest plantations, New Zealand 5992
  - pollen, ontogeny 5379
  - provenance trials, Canada 64
- ***Chamaecyparis nootkatensis***
  - climate, stand characteristics, population dynamics, simulation, Canada 7332
  - forest decline, climatic change, USA 8121
  - frost resistance, provenance, altitude, Canada 1083
  - genetic transformation, biolistics 6591
  - planting stock, gas exchange, plant water relations, roots, Canada 4335
  - provenance trials, Canada 64
  - seed maturation, seed morphology, chemistry, embryos 1220
- ***Chamaecyparis nootkatensis cont.***
  - stecklings, plant physiology, photoperiod, temperature 3563
- ***Chamaecyparis obtusa***
  - acid deposition, stemflow, soil chemistry, Japan 7999
  - biomass, increment, respiration, Japan 8707
  - branches, wood strength, Japan, testing 4632
  - bud culture, encapsulation, techniques 4286
  - dendrochronology, forest ecology, Japan 6761
  - diameter, measurement, photography 9572
  - dimensions, respiration, Japan 1271
  - essential oils, foliage, Japan, seasonal variation 6445
  - evapotranspiration
    - forest influences, microclimate, Japan 1117
    - soil water, Japan 3600
  - foliage, chemistry, terpenoids 4671
  - forest economics, profitability, Japan, analysis 2783
  - forest influences
    - microclimate, Japan 1189
    - soil fauna, arthropods, Japan 9714
    - streams, Japan, chemistry 4599
  - forest litter
    - decomposition
      - soil biology, Collembola, Japan 8799
      - soil fauna, Japan 6282
  - forest plantations, woody weeds, plant competition, height, diameter 6126
  - fungal diseases
    - *Seiridium unicorne*
      - Japan, spread, damage 4865
      - resistance, age of trees 6630
  - genetic variation, isoenzymes, Japan 565
  - growth models, Japan 1836
  - insect pests
    - Cerambycidae, Japan, attractants 4040
    - resistance, ethylene 4715
  - isoenzymes, population genetics, Taiwan 4835
  - logging
    - forest roads, Japan, access 9603
    - stand characteristics, Japan, damage, growth 7108
  - old-growth forests, natural regeneration, Japan, seedbeds 6917
  - plant composition, terpenoids 4715
  - plant growth regulators, volatile compounds, monoterpenes 1260
  - plant morphology, Japan, canopy, effects 9792
  - root systems, slopes, Japan, erosion control 5839
  - runoff, streams, Japan, chemistry 1533
  - sap flow, velocity, measurement, techniques 4187
  - selection forests, crown, stand structure, Japan 4360, 6824
  - soil chemistry, Japan, nitrogen, mineralization 4487
  - stand structure, thinning, Japan, equations, growth 3479
  - stems
    - growth models 1820
    - wind damage, Japan, shakes, distribution 9678
  - thinning
    - ground vegetation, Japan, *Rubus palmatus,* growth 1391
    - Japan, roads, economics 9522
    - landscape, Japan, aesthetic value, economics 8653
  - understorey
    - light, Japan, crown, broadleaves 8064
    - soil morphology, crusts, forest influences, Japan 9762
  - volume determination, merchantable volume, stem form, equations 1822
  - wildlife, browsing damage, Japan, fences, control 7529
- ***Chamaecyparis pisifera***
  - foliage, chemistry, diterpenes 5390
- ***Chamaecyparis pisifera cont.***
  - natural regeneration, forest ecology, Japan 4749
  - plant morphology, Japan, canopy, effects 9792
  - stand structure, light, Japan, natural regeneration, vegetative propagation 4801
- ***Chamaecyparis taiwanensis*** (*see Chamaecyparis obtusa)*
- ***Chamaecyparis thyoides***
  - microrelief, wetlands, disturbed land, USA 7875
  - nutrient uptake, translocation, USA, peatlands 5295
  - pollen analysis, forest fires, wetlands, plant succession, USA 3877
  - shoot cuttings 881
- ***Chamaecytisus palmensis***
  - root nodules
    - *Bradyrhizobium,* Australia 2241
    - *Rhizobium,* Australia 2241
- ***Chamaedorea tepejilote,*** uses, Guatemala 193
- ***Chamerion angustifolium,*** weeds, plant competition, soil temperature, plant nutrition 5141
- **Chaparral** (*see* Vegetation types, chaparral)
- **Charcoal**
  - production, history, soil properties, botanical composition, USA 9916
  - *Prosopis juliflora,* fuel plantations, spread, utilization, Kenya 6010
  - vegetation, history, soil formation, Switzerland 4760
- **Checklists**
  - Anacardiaceae, Thailand 3862
  - flora
    - Seychelles, books 757
    - Somalia, books 758
  - woody plants, Sri Lanka, books 3300
- ***Cheiloclinium cognatum,*** wood anatomy 6430
- **Chemical constituents** (*see* Plant composition; Wood chemistry)
- **Chemotaxonomy**
  - *Abies,* foliage, monoterpenoids 3043
  - *Acacia,* seeds, amino acids, evolution 9979
  - *Acacia karroo,* wood chemistry, flavonoids 9835
  - *Agathis,* foliage, flavonoids, New Zealand 8082
  - *Asteromyrtus,* essential oils 2118
  - *Betulaceae,* wood chemistry, extractives 4664
  - *Caesalpinia,* seeds, amino acids 8971
  - *Cupressus,* USA, terpenoids 4738
  - Cycadopsida, plant composition, flavones 3048
  - *Eucalyptus*
    - Chile, essential oils 1236
    - essential oils, chemistry, Australia 8094
    - foliage, chemistry, provenance, Australia 2986
    - species trials, essential oils, Australia 5399
  - flavonoids, interactions, reviews 9815
  - Gymnosperms, roots, mitosis, ascorbic acid 9899
  - Ingeae, plant composition, amino acids, evolution 8958
  - *Juniperus*
    - essential oils, Italy 6516
    - random amplified polymorphic DNA, terpenoids 5430
  - *Juniperus przewalskii,* China 3852
  - *Kopsia,* Asia 3846
  - *Maytenus,* Chile 4744
  - *Melaleuca quinquenervia,* seeds, Madagascar 9891
  - Myrtaceae, foliage, Australian Oceania, essential oils, chemistry 415
  - *Ormosia,* Latin America, alkaloids 4742
  - *Picea jezoensis,* cuticle, bark, triterpenoids, Japan 8083
  - *Pinus,* essential oils, Greece, plant composition 8686
  - *Pinus leucodermis,* genetic variation, Mediterranean Region 2194

Chemotaxonomy *cont.*
- *Pinus pinaster,* Spain, extractives 3047
- *Pinus sylvestris,* genetic variation, Russia 2181
- *Polylepis incana,* South America 5436
- *Quercus,* pollen, immunoprecipitation tests 423
- *Salix babylonica,* foliage, hybrids, flavonoids 583
- *Sophora secundiflora,* roots, chemistry, flavonoids 9841
- *Taxus,* foliage, chemistry, flavonoids 5391
- *Toona ciliata,* wood chemistry, limonoids, insect pests, resistance 3742

Chile
- *Acacia caven,* agroforestry, savannas 5878
- *Balsamocarpon brevifolium,* fruits, production, afforestation 6146
- birds, species diversity, rain forests, fragmentation 3219
- conifers, deforestation, nature conservation 3253
- *Eucalyptus*
  - breeding programmes 1435
  - chemotaxonomy, essential oils 1236
  - forest plantations 6134
- *Eucalyptus camaldulensis,* provenance trials, progeny testing 6028
- *Eucalyptus globulus*
  - coppice
    - height, equations 3325
    - volume, equations 3325
  - forest nurseries, containers, testing 3425
  - forest plantations, silviculture 3464
  - planting, machinery 959
  - provenance trials, progeny testing, genetic variation 8237
- *Fitzroya cupressoides,* silviculture 2660
- forest inventories, remote sensing, broadleaved evergreen forests 2751
- forest resources
  - deforestation, land use, forest management 5989
  - forestry 9400
- forest trees, genetic resources, nature conservation 7335
- forestry, statistics 2525
- *Gevuina avellana,* silviculture 2663
- insect pests
  - *Basileura osornoensis, Nothofagus dombeyi,* new species 2329
  - *Rhyacionia buoliana, Pinus radiata,* integrated control 1501
- *Laurelia philippiana,* assortments, secondary forests 992
- *Maytenus,* chemotaxonomy 4744
- mist, traps, design, Arid Regions 940
- mixed forests, forest fires, forest ecology 2916
- *Nothofagus*
  - assortments, secondary forests 992
  - forest plantations, natural regeneration, increment 6184
  - geographical distribution, genetic variation, adaptation, hybrids 6386
  - increment boring, techniques, secondary forests 6168
  - seed germination, vegetative propagation 6086
  - shoot cuttings 6062
  - stem form, taper, equations, secondary forests 6169
- *Nothofagus procera,* volume tables, secondary forests 992
- *Nothofagus pumilio*
  - forest litter 1101
  - silviculture, mensuration, synecology, reviews 955
- old-growth forests, Temperate Zones, biogeochemistry, cycling 5296
- *Pinus radiata*
  - agroforestry, forest plantations 5878
  - clear felling, burning, erosion, runoff 5843
  - forest management, uncertainty, simulation 7828
  - forest plantations 157

Chile *cont.*
- *Pinus radiata cont.*
  - forest plantations *cont.*
    - forest influences, soil properties 1185
  - provenance trials, increment, stem form 6027
  - site preparation, slash, soil chemistry 1750
- Podocarpaceae, foliage, frost resistance, lipids 274
- rain forests, forest trees, seed size, recruitment 7258
- *Robinia pseudoacacia,* breeding programmes, frost resistance 7362
- sclerophyllous forests, reproductive behaviour, habit 3839
- wildlife, small mammals, rain forests, habitats 7524
- woody plants, rain forests, phenology, climate 2930

Chilocorus rubidus, insect pests, *Quercus aliena,* Japan 9168

Chilopsis linearis
- plant water relations, stomatal resistance, abscisic acid, USA 2083
- street trees, drought tolerance, USA, testing 4509
- water use, transpiration, USA 8804

China
- agroforestry, history, development 10106
- *Camptotheca acuminata,* medicinal plants, reviews 7618
- coniferous forests, climatic change, simulation 3555
- *Cunninghamia lanceolata*
  - forest plantations, soil fertility 8018
  - reviews 2926
- deforestation, erosion, history 3252
- *Eucalyptus,* taxonomy, keys 7619
- Fabaceae 7265
- forest management, sustainability, forest economics, ethics, land ownership 2725
- forest policy, forest economics, rural development 5982
- forestry, education 5043
- fungal diseases
  - *Coccomyces guizhouensis, Pinus armandii* 2253
  - *Coccomyces keteleeriae, Keteleeria fortunei* 2253
  - *Mycosphaerella dearnessii, Pinus,* isolates, differentiation 9120
- insect pests
  - *Dendrolimus, Pinus,* research, pest management 2335
  - *Metabolus flavescens, Ginkgo biloba* 7483
- insects, *Schlechtendalia chinensis, Rhus chinensis,* galls, biology 9132
- *Juniperus przewalskii,* chemotaxonomy 3852
- *Larix gmelinii,* forest plantations, nitrogen cycle 7964
- *Larix olgensis,* provenance trials, wood properties 4583
- *Liquidambar,* genetic variation, isoenzymes 586
- medicinal plants
  - books 5931
  - cultural methods, books 1601
- *Morus atropurpurea,* tree breeding, polyploidy 7373
- *Paulownia,* agroforestry 5881
- *Pinus,* resin tapping 5163
- *Pinus massoniana,* genetic variation, isoenzymes 8213
- provenance trials, broadleaves 5941
- reclamation, soil conservation, water conservation 10082
- Sapindaceae, wood anatomy 8069
- shelterbelts, land use planning 2403
- species trials, broadleaves 5941
- termites, research 5684
- ultisols, soil formation, soil suitability, afforestation 8786
- urban forestry, forest influences 1588
- wildlife conservation 7544
- woody plants, erosion control, sand stabilization 9245

China *cont.*
- Anhui
  - *Castanea mollissima,* genetic resources 2218
  - coniferous forests, soil biology, Coleoptera 8800
  - *Cunninghamia lanceolata,* forest influences, soil, nutrients 8017
  - mixed forests, soil biology, Coleoptera 8800
  - *Paulownia,* agroforestry 3267
- Beijing
  - forests, soil water, aspect 8770
  - urban forestry, street trees 2435
- Fujian
  - *Acacia mearnsii,* provenance trials, increment 9058
  - *Cunninghamia lanceolata,* taungya, indigenous knowledge 7572
  - plant parasitic nematodes, *Tylenchulus semipenetrans, Cunninghamia lanceolata,* soil properties 5775
- Guangdong
  - *Eucalyptus,* nutrient deficiencies, boron 6323
  - *Eucalyptus exserta*
    - forest plantations, cycling, simulation 1139
    - nitrogen cycle, carbon cycle, simulation 4211
  - insect pests, *Dendrolimus punctatus, Pinus massoniana,* control 670
  - mangrove forests, fungi 7384
  - reclamation, eroded soils 3235
- Hainan
  - rain forests
    - forest ecology, fauna, Lycaenidae 10026
    - synecology 9911
- Heilongjiang
  - forests, history, railways, construction 7697
  - insect pests, *Antheraea yamamai, Quercus,* biology 7457
- Henan, insect pests, *Monochamus saltuarius, Pinus banksiana* 5740
- Hubei
  - broadleaved evergreen forests
    - forest litter, decomposition 1914
    - precipitation, canopy 2400
- Jiangsu
  - *Ginkgo biloba,* seed set 7215
  - *Pinus massoniana,* dendroclimatology 7614
  - *Populus,* plant morphology, genetic variation, tree breeding 593
  - street trees, microclimate, noise abatement 10156
- Jiangxi
  - *Acacia mearnsii,* provenance trials, increment 9058
  - *Cunninghamia lanceolata,* increment, growth models 6984
- Jilin
  - insect pests, *Paropsides soriculata, Crataegus,* biology 9166
  - *Larix olgensis,* thinning, growth 8652
  - *Pinus koraiensis,* mixed forests, plant succession, simulation 5457
- Liaoning
  - deciduous forests, secondary forests, stand structure, composition 4767
  - insect pests, *Lepidosaphes salicina,* shelterbelts, natural enemies 5688
- Nei Menggu, shrubs, site class assessment 9600
- Ningxia, shrubs, site class assessment 9600
- Shaanxi
  - *Populus tremula,* afforestation, soil conservation, soil water retention 5841
  - shrubs, site class assessment 9600
- Shanxi, forests, energy balance, evapotranspiration 8161
- Sichuan
  - forest trees, forest ecology, stand structure, vegetation types 3073

China *cont.*
  Sichuan *cont.*
    Paulownia fortunei, clones, wood properties 4259
    Pinus massoniana, air pollution, sulfur dioxide, forest decline 3669
    plant succession, canopy gaps, seedlings 1395
  Xinjiang, shelterbelts, snow, control 8381
  Yunnan
    Diospyros xishuangbannaensis, new species 9905
    Eucalyptus, nutrient deficiencies, boron 6323
    Grewia, taxonomy 2119
    insect pests
      Tomicus piniperda
        biology, control 2358
        Pinus, life tables 9170
        Pinus yunnanensis 9169
    multipurpose trees, agroforestry, lac 978
    rain forests, forest fragmentation, synecology, species diversity 8984
    tropical forests, deforestation, biodiversity, nature conservation 9006
Chionaspis heterophyllae, insect pests, *Pinus taeda*, USA 7438
Chiroptera
  Artibeus jamaicensis, Puerto Rico, feeding behaviour, foliage 6695
  Plecotus townsendii, USA, ecology 3208
  Pteropodidae, *Ficus chrysolepis*, seed dispersal, Philippines 686
  seed dispersal, tropical forests, reviews 3868
  tropical forests, seed dispersal, Indonesia 1403
Chlorocardium rodiei, photosynthesis, soil fertility, Guyana 7193
Chlorophora excelsa
  plant morphology, reproductive behaviour, Ghana 5420
  seedlings
    photosynthesis, light 3010
    respiration, light 3010
  species trials, agroforestry, acid soils, Cameroon 2542
Chlorophora regia, plant morphology, reproductive behaviour, Ghana 5420
Chlorophyll
  Acer platanoides, foliage, optical properties 2996
  Aesculus hippocastanum, foliage, optical properties 2996
  fluorescence, *Picea abies*, light, acclimatization 467
  forest trees, photosynthesis 3788
  Pinus pinea, light 6490
  Pseudotsuga menziesii, foliage, optical properties, photosynthesis 2066
  synthesis, *Pinus*, seedlings, light 1276
Chloroplasts
  Prunus avium, carbon dioxide enrichment, plant physiology, biochemistry, growth 1879
  separation, *Picea abies*, methodology 5953
Chloroscypha seaveri, fungal diseases, *Cryptomeria japonica*, Japan, ecology, pathogenicity 9116
Choice of species
  Acacia, agroforestry, Australia, arid zones, subtropics 3369
  Acer pseudoplatanus, nature conservation, UK, reviews 10125
  afforestation
    Costa Rica 9423
    saline soils, Russia 2544
  agroforestry
    Bolivia, books 9
    climatic change, greenhouse effect, control 2796
    Costa Rica 9423
    root systems, plant competition, soil fertility 10100
  air pollution, amelioration of forest sites, cycling, Germany 2850
  Atriplex, fodder, genetic resources, India 2556

Choice of species *cont.*
  broadleaves, foliage, plant water relations, India 8821
  canes and rattans
    Asia
      conferences 7714
      handbooks 7714
  community forestry, waste land, reclamation, India 4123
  conifers, afforestation, altitude, France 9421
  Costa Rica 2558
  direct sowing, multipurpose trees, farm forestry, Australia 10121
  Eucalyptus, social forestry, development projects, India 6737
  farm forestry, Bangladesh 6717
  forest plantations, Costa Rica 9423
  forest trees
    forestry development, South America, handbooks 2551
    fuel plantations, India 58
    protection forests, avalanches, Germany 6869
    wood properties, forest management, Venezuela 6025
  improvement planting, Costa Rica 9423
  indigenous knowledge, browse, plant composition, Kenya 6669
  multipurpose trees
    agroforestry, development projects, Cameroon 6734
    Asia, reviews 1656
    farm forestry, Bangladesh 6716
    fodder, Nepal 6948
    reclamation, eroded soils, community forestry, Indonesia 3237
  nature conservation, Costa Rica 9423
  nitrogen fixing trees, agroforestry 2415
  Peronema canescens, soil fertility, Indonesia 825
  planning, watersheds, rehabilitation, Indonesia 6700
  Populus, site types, Russia 65
  Populus tremula, silviculture, utilization, UK, reviews 9546
  reclamation, eroded soils, site class assessment, India 6705
  selection criteria, multipurpose trees, tree breeding, research, West Africa 8186
  tropical forests, introduced species 6015
  urban forestry, expert systems, USA 2434
  woody plants
    fynbos, South Africa, expert systems 9359
    oilseed plants, land development, India 1657
Choristoneura fumiferana
  insect pests
    Abies balsamea
      biological control
        bacterial insecticides 7507
        Canada 7503
      Canada
        biological control 676
        damage, stand structure 7536
        dendrochronology 5702
      feeding behaviour 2322
      stand development, Canada 1412
    Bacillus thuringiensis, pathogenesis 5727
    biological control, parasitoids 9193
    Canada
      Bacillus thuringiensis, resistance 8354
      control, public opinion 2381
      parasitoids 5723
    chemical control 7506
    conifers
      biological control 675
      stand development, simulation, Canada 4224
    forest management, sustainability, Canada 237
    forest trees, natural regeneration, USA 1487
    Picea glauca, Canada 639
    Picea mariana, Canada, biological control 676

Choristoneura fumiferana *cont.*
  insect pests *cont.*
    simulation, USA, population dynamics 796
Choristoneura murinana, insect pests, Germany, biological control 5803
Choristoneura occidentalis
  insect pests
    Abies grandis, sampling, biological control 5800
    biological control, parasitoids 9193
    conifers, dendrochronology, USA 6765
    Pseudotsuga menziesii
      foliage
        carbohydrates, terpenoids 5718
        chemistry, resistance 8093
      sampling, biological control 5800
      USA 8093, 9152
Choristoneura pinus
  insect pests
    Pinus banksiana
      Canada, population dynamics 5715
      USA, population dynamics 1482
Chosenia arbutifolia, wood chemistry, extractives, lignans 428
Christmas Island, reclamation, mined land, national parks, birds, conservation 3234
Christmas trees
  Abies, provenance trials, Denmark 6945
  Abies fraseri
    genetic variation
      increment, USA 3125
      quality, USA 3125
    grading, prices, USA 9557
    growth stress, stems, splitting 3467
    propagation 6144
    provenance trials, USA 4260
    pruning, USA 9556
    tree breeding, early selection, USA 3126
  Cupressocyparis leylandii, USA 9558
  deer, *Odocoileus virginianus*, *Pinus strobus*, USA 4370
  economics, Canada 4372
  edible fungi, Mexico, plantations, economics 6955
  fungal diseases, *Phytophthora*, *Abies procera*, USA 9097
  Germany 2669
  Picea abies
    Italy, forest economics, production, quality 3468
    paclobutrazol, Italy 4371
    plant growth regulators 2667
    silviculture, Russia 965
  Pinus sylvestris, progeny testing, USA 2668
  USA, consumer behaviour 6143
Chromosome aberrations
  Picea abies
    air pollution 6584
      seed germination, Slovenia 5335
    site factors 6584
Chromosome number
  Alnus acuminata, Latin America 2222
  Alnus jorullensis, Latin America 2222
  DNA, *Leucaena* 8247
  variation, *Acacia* 9051
Chromosomes
  Larix, cytotaxonomy 8224
  Larix sibirica, isoenzymes, taxonomy 4746
  mangroves, *Heritiera*, India 8235
  Picea mariana, morphology, karyotypes 2189
  Pinus sylvestris, Russia, karyotypes 8194
  variation, *Abies concolor* × *Abies grandis*, tissue culture, micropropagation 8191
Chrysocoris purpureus, insect pests, *Populus deltoides*, forest nurseries, India 7433
Chrysomela aeneicollis, insect pests, *Salix*, USA 654
Chrysomela confluens, insect pests, *Populus*, damage, ecology 5754
Chrysomela falsa, insect pests, *Salix*, foliage, USA 4032
Chrysomela lapponica, insect pests, broadleaves, plant composition 2352

- ***Chrysomela scripta,*** insect pests, *Populus,* USA, genetic diversity 9172
- **Chrysomelidae,** insect pests, USA, distribution 2343
- ***Chrysophtharta bimaculata***
  - insect pests
    - *Eucalyptus,* Australia, defoliation 7461
    - *Eucalyptus regnans*
      - Australia 6656
        - predators 5738
- ***Chrysophyllum,*** wood anatomy, wood properties 6428
- ***Chrysophyllum lucentifolium,*** monkeys, *Alouatta seniculus,* seed dispersal, French Guiana, interactions 7541
- ***Chukrasia tabularis***
  - energy value, seasonal variation, India 2541
  - foliage
    - plant water relations, biomass production, India 8821
    - sugars, photosynthesis 6485
- ***Chusquea,*** bamboos, rain forests, Peru, forest ecology 538
- ***Chusquea culeou,*** bamboos, Argentina, biology 1201
- ***Chusquea tessellata,*** bamboos, stand structure, biomass, Colombia 3080
- ***Cibotium glaucum,*** rain forests, plant nutrition, USA, growth 5455
- ***Cinara,*** insect pests, conifers, Bulgaria 631
- ***Cinara costata,*** insect pests, *Picea abies,* Sweden, water stress, pest resistance 10032
- ***Cinara cupressi***
  - insect pests
    - conifers, Malawi, biological control 8350
    - *Cupressus lusitanica*
      - Kenya
        - clones, resistance 1479
        - damage 7440
        - ecology 7445
      - Tanzania, clones, resistance 1479
- ***Cinara pilicornis,*** insect pests, *Picea abies,* air pollution, ozone, Switzerland 5693
- ***Cinara pini***
  - insect pests
    - Argentina 2301
    - *Pinus,* Europe, taxonomy 630
- ***Cinara setosa,*** insect pests, conifers, Italy, morphology 9142
- ***Cinara todocola,*** insect pests, *Abies sachalinensis,* forest plantations, Japan, spacing 633
- ***Cinnamomum,*** plant composition, essential oils, Sri Lanka 416
- ***Cinnamomum camphora,*** seed treatment, seed dormancy 3379
- ***Cinnamomum japonicum***
  - essential oils, foliage, Japan, seasonal variation 6445
  - stems, growth models 1820
- ***Cinnamomum mollissimum,*** non-wood forest products, forest economics, Peninsular Malaysia 963
- ***Cinnamomum sulphuratum,*** endangered species, geographical distribution, India 8959
- ***Cistus incanus,*** forest fires, wood ash, seed germination, seedling growth 382
- ***Cistus ladanifer***
  - mycorrhizas, *Laccaria laccata* 9083
  - scrub, synecology, species diversity, Spain 9922
- ***Cistus laurifolius,*** sclerophyllous scrub, habit, Spain 3705
- ***Cistus salviifolius,*** forest fires, wood ash, seed germination, seedling growth 382
- **Classification**
  - bogs, Russia 533
  - forests, synecology, Canada, disturbed land 1357
  - peatlands, Russia 533
  - reclamation, landfills, UK 6710
  - stand characteristics, forest ownership, remote sensing, USA 6223
  - tropical forests, remote sensing, Brazil 6225
- **Classification** *cont.*
  - vegetation types
    - geographical distribution, Africa, theory 6542
    - synecology, North America 3082
- ***Clavigesta sylvestrana,*** insect pests, *Pinus,* Spain, biology, damage 8332
- **Cleaning**
  - broadleaves, North America 162
  - brush cutters, Canada 9550
  - conifers
    - forest plantations, France 6932
    - weed control
      - USA 2650
        - growth 2651
  - *Pinus halepensis,* yield tables, France 6987
  - *Quercus robur,* Germany 6121
  - yields
    - bamboos
      - *Bambusa vulgaris,* Indonesia 1800
      - *Gigantochloa,* Indonesia 1800
- **Clear felling**
  - birds
    - *Abies balsamea,* Canada, buffer zones 4072
    - ecology, USA 3216
    - parasitism, landscape, USA 6911
    - *Pinus clausa,* forest fires, USA 9213
    - species diversity, USA 1510
  - boreal forests, natural regeneration, Russia, simulation 9965
  - broadleaves, natural regeneration, species diversity, USA 3121
  - burning, *Pinus radiata,* erosion, runoff, Chile 5843
  - cloud forests, plant succession, Venezuela 5458
  - conifers
    - forest borders, USA, stand characteristics 1333
    - soil properties, understorey, Canada 3585
    - watersheds, USA, pH 352
  - cycling, soil chemistry, streams, USA 2907
  - deciduous forests
    - carbon cycle, respiration, USA 3592
    - natural regeneration, France 3959
    - solar radiation, albedo, Canada 8009
  - deer
    - *Odocoileus hemionus,* USA, habitats 8366
    - *Rangifer tarandus,* Canada, ecology 687
  - environmental impact, North America, books 5923
  - *Eucalyptus regnans,* soil physical properties, Australia, logging effects 5237
  - forest influences, pollution, heavy metals, Norway 8019
  - forest trees, natural regeneration, Sweden 3439
  - forestry, hydrology, drainage, flooding, Sweden 4932
  - landscape, USA 6754
  - *Larix sibirica,* natural regeneration, biomass production, Russia 9494
  - logging effects, *Pinus radiata,* forest litter, cycling, Spain 5251
  - *Picea abies*
    - advance growth, nitrogen fertilizers, Russia 4294
    - soil biology, Finland 5273
  - *Picea sitchensis*
    - soil chemistry, UK 7127
    - watersheds, UK, aluminium 353
  - *Pinus,* microclimate, USA 5349
  - *Pinus pinaster,* burning, soil chemistry, South Africa 4613
  - *Pinus sylvestris*
    - coniferous forests, synecology, Estonia 1363
    - fertilizers, soil chemistry, denitrification, Sweden 1095
    - soil chemistry, Sweden, nitrogen, leaching 7044
  - *Pinus taeda,* understorey, species diversity, USA 1765
  - *Quercus,* natural regeneration, USA 147
  - rain forests, erosion, Sabah 1748
- **Clear felling** *cont.*
  - salamanders, forest trees, USA, population dynamics 3195
  - savanna woodlands, coppice, Burkina Faso, regeneration 7768
  - site preparation, altitude, soil water regimes, Canada 3447
  - soil chemistry, gas exchange, Puerto Rico 1070
  - soil density, tractors, USA, damage 2810
  - streams, fauna, Australia 3679
  - whole tree logging
    - *Picea abies*
      - carbon cycle, simulation, Sweden 4535
      - soil water, chemistry, Sweden 3569
  - wildlife
    - birds, cavities in trees, Sweden 6690
    - lizards, *Pinus clausa,* USA 4920
    - *Martes americana,* Canada, boreal forests 3204-3205
    - small mammals, North America, ecology 3193
- **Clear-felling system** (*see* Silvicultural systems, clear felling)
- ***Cleistocalyx,*** taxonomy, Thailand 8972
- ***Clethra,*** taxonomy 3044
- ***Clethra occidentalis,*** plant colonization, landslides, Jamaica 4793
- ***Clethrionomys californicus***
  - voles
    - *Pseudotsuga menziesii*
      - truffles, USA 7521
      - USA, habitats 7522
    - USA, forests, fragmentation 7528
- ***Clethrionomys glareolus***
  - voles
    - *Populus,* Germany, trapping 3212
    - *Salix,* Germany, trapping 3212
- ***Cleyera japonica,*** roadside plantations, forest influences, air pollution, Japan 7126
- **Climate** (*see also* Dendroclimatology; Microclimate)
  - *Abies alba,* water stress, plant physiology, France 4515
  - *Abies lasiocarpa*
    - cones, increment, USA 2098
    - forest fires, natural regeneration, USA 1416
  - *Abies procera,* provenance trials, increment, Canada 2549
  - *Acacia*
    - phenology, site factors, soil water, Australia 3707
    - vegetation types, landscape, Kenya 2156
  - *Acer saccharum,* biomass, acid deposition, USA 5172
  - amenity trees, site factors, soil, adaptation, selection criteria 4984
  - *Araucaria angustifolia,* pollen analysis, geographical distribution, Brazil 2129
  - *Arbutus unedo,* reproductive behaviour, Italy 3838
  - *Betula,* frost injury, North America 9672
  - *Betula papyrifera,* stomatal resistance, simulation, Canada 801
  - boreal forests
    - carbon cycle, Russia, simulation 328
    - forest ecology, Finland 8140
    - geographical distribution, Canada 4771
  - broadleaves
    - frost resistance, simulation, USA 800
    - stand development, light, phenology, Italy 8665
    - street trees, USA, stress, tolerance 4985
  - coniferous forests
    - air pollution, ozone, USA 7102
    - biomass production, USA 1339
    - synecology, simulation, USA 1340
  - conifers
    - dendroclimatology, increment, USA 4990
    - increment, diameter, Russia 9592
    - soil properties, Sweden 9683
  - deciduous forests
    - dendrochronology, soil, Canada 4142

Climate *cont.*
- deciduous forests *cont.*
  - synecology, soil properties, Venezuela 1370
- deforestation, simulation, Tropics 3255
- *Eucalyptus camaldulensis,* shoots, growth, plant physiology, Australia 3765
- *Eucalyptus globulus,* agroforestry, crops, interface, simulation 9357
- *Fagus sylvatica*
  - increment, Germany, simulation 1058
  - wood anatomy, vessels, Switzerland 8894
- forest decline 3809
  - air pollution, Central Europe 8946
- forest litter, decomposition, reviews 3583
- forest plantations, height, increment, Spain 1826
- forest trees
  - geographical distribution, synecology, New Zealand 7266
  - phenology, Argentina 1210
  - treelines
    - grazing
      - Russia 7277
      - Scandinavia 7277
- forests, synecology, Sri Lanka 1373
- measurement, equipment, simulation 1609
- meteorological factors, forest fires, fire prevention, Italy 6374
- mixed forests
  - botanical composition, simulation, Switzerland 3957
  - transpiration, estimation, Czech Republic 3324
- mountain forests, stand characteristics, simulation, Canada 7332
- *Pinus ponderosa,* biomass distribution, USA, simulation 4406
- *Pinus resinosa,* geographical distribution, simulation, North America 2135
- *Pinus sylvestris*
  - afforestation, peatlands, forestry practices, Sweden 6112
  - air pollution, Finland, measurement 5324
  - biomass production, simulation, Finland 3488
  - forest litter
    - decomposition, site factors, Sweden 4495
    - foliage
      - measurement
        - Europe 7902
        - Spain 7902
  - plant morphology, water stress, UK 5222
  - sapwood, foliage, plant water relations, Europe 5284
  - wood anatomy, foliage, weight, correlation 8058
- *Pinus taeda,* foliage, stand development, USA 6977
- *Pinus uncinata,* increment, diameter, France 7860
- pollen analysis, vegetation, history, USA 513
- *Populus tremuloides,* stomatal resistance, simulation, Canada 801
- *Prosopis caldenia,* phenology, Argentina 1210
- *Quercus*
  - deciduous forests, synecology, Spain 3903
  - dendrochronology, carbon dioxide enrichment, France, simulation 4466
- *Quercus pyrenaica,* biomass production, forest litter, stand density, Spain 1824
- rain forests, USA 9669
- remote sensing
  - multispectral imagery, vegetation, reflectance, Australia 1867
  - satellites, vegetation, conferences 4178
- savannas, forest management, silvicultural systems, Africa 8600
- simulation, vegetation, effects 7678

Climate *cont.*
- steppes, carbon cycle, Russia, simulation 328
- storms
  - rain forests, forest fires, Australia 7256
  - savannas, forest fires, Australia 7256
- synecology
  - simulation, USA, diurnal variation 1341
  - USA, conferences 2466
- *Tsuga mertensiana,* cones, increment, USA 2098
- USA 8754
- vegetation, history, pollen analysis, New Zealand 3886
- vegetation types
  - biomass production, remote sensing, USA 2691
  - geographical distribution, Russia, simulation 3938
  - hydrology, stream flow, Philippines 5838
  - plant nutrition, nitrogen, North America 1130
- wood anatomy, dicotyledons, North America 268
- woody plants
  - geographical distribution, simulation, USA 3070
  - rain forests, phenology, Chile 2930
  - species diversity, Southern Africa 2150

Climatic change
- adaptation, conifers, provenance trials, temperature, simulation 1660
- agroforestry
  - carbon cycle, deforestation, control 3259
  - choice of species, greenhouse effect, control 2796
- biomass production, simulation, nitrogen cycle 1834
- boreal forests
  - carbon cycle, research projects, Canada 9943
  - forest ecology, simulation, Finland 1621
  - land use, Canada, socioeconomics 8540
  - permafrost, Canada 7871
- carbon cycle, forest management, carbon dioxide enrichment, research, reviews 4533
- carbon dioxide enrichment, gas exchange, metabolism 5225
- *Chamaecyparis nootkatensis,* forest decline, USA 8121
- coniferous forests
  - China, simulation 3555
  - simulation, USA 3542
- conifers
  - buds, phenology, provenance trials, Finland 2009
  - growth models, USA 8705
- energy resources, forestry, Sweden 4471
- forest ecology
  - forest policy 1961
  - simulation
    - reviews 1960
    - Sweden 3110
    - USA 2790
- forest policy
  - deforestation, biodiversity 5023
  - greenhouse effect, Poland 2797
- forest resources, simulation, USA 3543
- forest trees
  - forest ecology, plant physiology, genetics, conferences 1606
  - genetics, adaptation 2172
  - geographical distribution, migration, USA, simulation 9665
  - global warming, stand structure, botanical composition 7029
  - natural regeneration, stand characteristics, botanical composition, Poland 7330
  - phenology, Europe 4618
  - pollination, genetic diversity, air pollution, reviews 5424

Climatic change *cont.*
- forest trees *cont.*
  - provenance trials, genotype environment interaction, simulation 1659
- forestry
  - carbon cycle
    - global warming
      - Russia 9661
      - World 9661
  - deforestation 5224
- forests
  - Canada, simulation 7870
  - hydrology, conferences 3305
  - simulation, North America, growth 3551
  - Temperate Zones, forecasting 3541
- genetics, Austria, conferences 9328
- insect pests, population dynamics, reviews 2307
- land use, integrated systems, agroforestry, greenhouse effect 2795
- mangrove forests
  - peat, formation, Caribbean 6270
  - USA, environmental assessment 6264
- mangroves, Australia 6269
- measurement, equipment, simulation 1609
- nature conservation, forest management, sustainability, land use, conferences 19
- phenology
  - buds, climatic zones, simulation 7865
  - frost resistance, simulation, Western Europe 2804
- *Picea mariana*
  - early selection, Canada 3978
  - seedling growth, plant nutrition, nitrogen, genetic variation 9666
  - treelines, Canada, history 2127
- *Pinus sylvestris*
  - carbon dioxide enrichment, photosynthesis, Finland 7861
  - coniferous forests, UK 2794
  - frost injury, increment, phenology, simulation 7040
  - frost resistance, Finland, simulation 5231
  - transpiration, simulation, Sweden 4516
- plant physiology, plant succession, simulation 3333
- plant succession, simulation, Europe 8171
- pollen analysis, vegetation, history, Canada, simulation 2124
- sclerophyllous scrub, Mauritania, degradation 7296
- simulation, USA 2507
- stress, plant physiology, conferences 1597
- treelines, monitoring 7866
- tropical forests
  - deforestation, simulation 3557
  - phenology, foliage, seasonality 8043
- UK, environmental policy, books 267
- vegetation types
  - forests, Spain 9668
  - simulation, Switzerland 7267

Climatic factors
- *Alnus incana,* nitrogen fixation, diurnal variation 3015
- *Picea abies,* seed orchards, reproductive behaviour, cold resistance, Norway 9878

Climatology, boreal forests, simulation 4768

Climbers
- *Danais*
  - taxonomy
    - Comoros 9892
    - Madagascar 9892
- *Liquidambar styraciflua,* plant competition, USA, woody weeds 6122
- synecology, habit, forest trees, South Africa 3946

Clonal variation
- *Picea abies*
  - grafting
    - seed orchards
      - flowering, Poland 841

- **Clonal variation** *cont.*
  - *Picea abies cont.*
    - grafting *cont.*
      - seed orchards *cont.*
        - mortality, Poland 841
- **Clones**
  - *Abies sachalinensis,* heritability, Japan, wood properties 7118
  - *Alnus cordata,* grafting, Italy, growth 8579
  - *Bombacopsis quinata,* shoot cuttings, management, Colombia 1705
  - broadleaves, tree breeding, salt tolerance, waterlogging, Australia 3138
  - *Cryptomeria japonica*
    - genetic variation
      - wood anatomy 6587
      - wood chemistry, Japan 7341
      - wood properties, spacing 9758
    - wood anatomy, growth rings, genetic variation 4591
  - forest trees, vegetative propagation, economics, reviews 94
  - genotype mixtures, *Picea abies,* increment, height, Sweden 1422
  - identification
    - *Eucalyptus,* genetic markers 5527
    - *Eucalyptus grandis,* molecular genetics, South Africa 576
  - insect pests, *Malacosoma disstria, Populus,* defoliation, resistance 3182
  - *Paulownia fortunei,* wood properties, China 4259
  - *Populus*
    - species trials, breeding programmes, India 577
    - variety trials, India 62
  - resistance
    - bacterial diseases
      - *Xanthomonas*
        - *Populus,* Netherlands 1465
        - *Salix dasyclados,* Netherlands 1465
  - tree breeding, breeding programmes, seedlings, genetic variance, simulation 9967
- ***Clostera inclusa,*** insect pests, *Populus deltoides,* USA, damage 4037
- **Clouds,** *Picea rubens,* acid deposition, stand structure, USA 6261
- ***Clusia***
  - choice of species, forestry development, South America, handbooks 2551
  - cloud forests, clear felling, plant succession, Venezuela 5458
  - photosynthesis, Venezuela, metabolism 2990
- ***Clusia major,*** plant composition, propolis, Venezuela 1232
- ***Clusia minor***
  - photosynthesis, carbon pathways, Trinidad and Tobago, seasonal variation 4714
  - plant composition, propolis, Venezuela 1232
- ***Clusia nemorosa,*** flowers, Apidae, behaviour, Brazil 9883
- ***Clusia rosea,*** photosynthesis, metabolism, habit, United States Virgin Islands 4700
- **Clusiaceae**
  - medicinal plants
    - Africa 200
    - South America 200
- **Coastal areas,** nature conservation, France, administration 736
- ***Coccinella septempunctata,*** insect pests, *Quercus,* Hungary, ecology 9165
- ***Coccoloba manzanillensis,*** canopy gaps, transpiration, regulation, Panama 6302
- ***Coccomyces guizhouensis,*** fungal diseases, *Pinus armandii,* China 2253
- ***Coccomyces keteleeriae,*** fungal diseases, *Keteleeria fortunei,* China 2253
- ***Coccothrinax readii,*** stand characteristics, forest management, sustainability, Mexico 7327
- ***Cochliobolus lunatus,*** fungal diseases, *Acacia nilotica,* forest nurseries, India 9085
- ***Cochlospermum vitifolium,*** wood anatomy 4630
- ***Cocos nucifera***
  - forest plantations, Togo 8533
  - silvicultural characters 9410
  - wood chemistry
    - esters 1253
    - Indonesia 2058
- **Codes of practice** (*see* Standards)
- **Cold hardening,** *Pseudotsuga menziesii,* frost injury, simulation, USA 1888
- **Cold injury**
  - *Picea abies*
    - seedlings, Sweden, damage 9675
    - shoot cuttings, Sweden, damage 9675
  - *Picea rubens,* foliage, USA, damage 7036
- **Cold resistance**
  - acclimatization, *Eucalyptus,* hybrids, plant physiology, Portugal 1890
  - *Eucalyptus gunnii,* heritability, France, provenance, growth 9053
  - *Forsythia,* flowers, buds, physiology 8757
  - *Leptospermum scoparium,* hardening, temperature, New Zealand, variation 8762
  - *Picea abies,* seed orchards, reproductive behaviour, climatic factors, Norway 9878
- **Cold storage,** *Picea glauca,* water stress, plant physiology, effects 6903
- **Cold Zones,** phenology, buds, climatic change, simulation 7865
- ***Coleophora fuscedinella*** (*see Coleophora serratella)*
- ***Coleophora laricella,*** insect pests, *Larix occidentalis,* Canada 638
- ***Coleophora serratella,*** insect pests, *Betula,* UK, interactions 2320
- **Coleoptera**
  - insect pests
    - forest trees
      - Germany 2355
      - Russia, disease vectors, decay fungi 9131
    - *Picea abies,* snow damage, Sweden, susceptibility 10045
    - *Pinus sylvestris,* snow damage, Sweden, susceptibility 10045
    - rain forests, Malaysia, trapping 7481
  - insects, *Populus,* linear plantations, Germany, ecology 2298
  - *Picea abies,* Germany, dead wood 1472
  - *Quercus robur,* Germany, dead wood 1472
  - species diversity
    - boreal forests, forest ecology, Sweden 1471
    - deciduous forests, forest ecology, Sweden 1471
- ***Colinus virginianus,*** birds, USA, habitats 6671
- **Collembola**
  - *Pseudotsuga menziesii,* stumps, plant succession, Canada 4028
  - *Quercus ilex,* soil biology, Spain 1921
- ***Colletotrichum dematium,*** fungal diseases, *Fagus crenata,* natural regeneration, Japan 4853
- ***Colletotrichum gloeosporioides*** (*see Glomerella cingulata)*
- ***Collybia fusipes,*** fungal diseases, conferences 3311
- **Colombia**
  - bamboos, *Chusquea tessellata,* stand structure, biomass 3080
  - birds, shifting cultivation, rain forests 3222
  - *Bombacopsis quinata*
    - clones, shoot cuttings, management 1705
    - forest nurseries, management 1731
    - seed orchards
      - management 2200
      - pollination 1685
    - shoot cuttings, growing media 1706
  - broadleaves
    - grafting 879
    - shoot cuttings 879
  - caatinga, synecology 3921
  - *Cavanillesia platanifolia,* secondary forests, phenology, forest litter 1205
- **Colombia** *cont.*
  - cloud forests, stand structure 1408
  - *Conceveiba parvifolia,* new species 9903
  - *Cornus peruviana,* geographical distribution, seed dispersal, birds 1327
  - *Eucalyptus grandis,* tree breeding, progeny testing, early selection, increment 2225
  - forest trees, genetic resources, conservation 3968
  - fungi, isolation, *Cryptococcus, Eucalyptus,* human diseases 7713
  - insect pests, *Heteropsylla cubana, Leucaena leucocephala* 7444
  - *Metteniusa cogolloi,* taxonomy 492
  - mistletoes, Loranthaceae, seed dispersal, forests 1469
  - *Pinus,* provenance, breeding programmes 7348
  - *Pinus patula*
    - progeny testing, wood density 3979
    - soil water, repellency 1900
  - rain forests
    - epiphytes, spatial distribution 1387
    - species diversity 5446
  - *Siparuna harlingii,* taxonomy 6518
  - tropical forests, seed banks, natural regeneration 1314
- ***Colophospermum mopane***
  - diameter, increment, Zimbabwe, site factors, growth effects 7121
  - geographical distribution, site factors, vegetation types, Africa 6535
- ***Coloradia pandora,*** insect pests, *Pinus ponderosa,* thinning, USA 9148
- ***Columba leucocephala,*** birds, deciduous forests, fragmentation, USA 4059
- ***Columba palumbus,*** birds, farm woodlands, hedges, UK, control 1509
- ***Colutea nepalensis,*** biomass production, India, equations 789
- ***Combretum aculeatum,*** browse, indigenous knowledge, Kenya 6669
- ***Combretum apiculatum***
  - canopy
    - woodland grasslands
      - ground vegetation, South Africa 359
      - soil fertility, South Africa 359
  - diameter, increment, Zimbabwe, site factors, growth effects 7121
  - forest influences, soil fertility, savannas, Zimbabwe 6369
- ***Combretum laxum,*** biomass, plant colonization, Brazil, estimation 7823
- ***Combretum micranthum,*** agroforestry, Niger, cattle, grazing, management 4960
- ***Combretum nigricans***
  - agroforestry, Niger, cattle, grazing, management 4960
  - phloem 8071
- **Community forestry**
  - deforestation, environmental degradation, Nepal 8413
  - degraded forests, rehabilitation, forest management, India 4121
  - development, extension, Nepal 7584
  - development projects
    - extension, Tanzania 1571
    - India 4120
    - international cooperation, Thailand, reports 760
    - Latin America, management, sustainability 2424
    - Nepal, woman's status 3276
    - non-governmental organizations, Asia, conferences 774
    - Tanzania 5890
  - farm forestry, UK 4124
  - forest management
    - Canada 6738-6740
    - Developing Countries 6741
    - development projects
      - economics, Peru 8545
      - Nepal 8729
      - Tanzania 1570
    - India 9292
    - Nepal 9291
    - participation
      - India 3495, 3498, 6197, 6200

- **Community forestry** *cont.*
  - forest management *cont.*
    - participation *cont.*
      - planning, India 3499
      - project appraisal, India 6198
      - research, requirements, India 3357
      - Sri Lanka 8529
      - sustainability, India 3348
      - training, India 3358
    - planning, India 3496
    - resource management, Tropics, bibliographies 6795
    - Senegal 9294
    - sustainability
      - India 7834
      - Nepal 9290
      - protection of forests, forest products, Nepal 6742
  - forest policy, India 1630
  - *Gliricidia sepium,* spacing, weed control, Malawi 1786
  - mountain forests, biodiversity, conservation, Cameroon 9293
  - multipurpose trees, reclamation, eroded soils, choice of species, Indonesia 3237
  - participation, waste land, reclamation, India 4092
  - planning
    - choice of species, waste land, reclamation, India 4123
    - participation, Nepal 9289
  - projects, forest management, participation, India 3497
  - surveys, Asia, trees, products, utilization 1548
  - sustainability, development projects, Thailand 5889
  - Tanzania 10118
  - tropical forests, forest management, tenure systems, Latin America 3494
  - UK, valuation 729
  - urban areas, USA 2423
  - urban forestry, USA 4963
- **Comoros**
  - *Danais,* climbers, taxonomy 9892
  - *Ravenea,* taxonomy 8963
- **Compensation,** soil pollution, heavy metals, legislation, Germany 7922
- **Competition** (*see* Plant competition)
- **Composts**
  - Brunei Darussalam, peat, utilization 8590
  - wood residues, *Pinus sylvestris,* increment, Australia 7763
- **Computer software,** multipurpose trees, databases, decision making 4227
- **Computer techniques**
  - *Abies sachalinensis,* plant morphology 1624
  - agroforestry, simulation 9358
  - farm forestry, investment, economic analysis, USA 37
  - forest fires, fire danger 1998
  - forest inventories
    - information processing, Japan 6993
    - Switzerland 6835
  - forest management
    - decision making, mathematics 1623
    - planning, USA 3349
  - forestry
    - education 2514
    - information science, France 820
  - forests, valuation, nature conservation, UK 5892
  - information services, Russia 4228
  - information systems, forest management, Switzerland 34
  - insect pests, *Lymantria dispar,* damage 35
  - organizations, South Africa 7686
  - *Pinus nigra,* valuation, France 1050
  - *Pseudotsuga menziesii*
    - forest management
      - decision making
        - Canada 1623
        - USA 1623
  - rain forests, forest trees, keys, Australia 6769
  - silviculture, forest management, Canada, decision making, planning 9368
- **Computer techniques** *cont.*
  - tree breeding
    - progeny testing, experimental design 8188
    - seed orchards, experimental design 556
- ***Conceveiba parvifolia,*** new species, Latin America 9903
- **Cones** (*see also* Seeds)
  - *Abies alba,* seeds, Romania, production 8949
  - *Abies pinsapo,* anatomy, phenology 3841
  - conifers, decay, resistance 604
  - *Cupressus bakeri,* genetic variation, taxonomy, USA 2198
  - development
    - conifers, reviews 2050
    - *Zamia furfuracea,* pollination, insects, sex 3835
  - diameter, *Abies pindrow,* seeds, India 1678
  - distribution, *Picea sitchensis,* girdling, plant growth regulators, gibberellins 3042
  - fungal diseases
    - *Cronartium conigenum, Pinus maximinoi,* Guatemala, histology 9090
    - resistance, proanthocyanidins 5621
  - insect pests
    - *Picea abies*
      - Norway 7431
      - Poland, parasitoids 2304
      - Switzerland 8327
  - insects, reviews, interactions 5677
  - life tables, *Pinus banksiana,* Canada, statistical analysis 3843
  - longevity, *Cupressus sempervirens,* seed dispersal, Israel 5421
  - morphology, *Pinus contorta,* fire effects, natural regeneration, USA 1200
  - *Picea mariana,* gibberellins, root pruning, production 9847
  - *Pinus cembra,* genetic variation, seeds, Romania 9040
  - *Pinus strobus,* genetic variation, Canada 8197
  - *Pinus sylvestris,* genetic variation 8199
  - processing, *Pinus rigida,* seed germination, USA 8572
  - production
    - *Abies lasiocarpa,* climate, increment, USA 2098
    - *Abies mariesii,* diameter, Japan 4736
    - *Agathis dammara,* Indonesia, estimation 1614
    - *Pinus albicaulis,* USA, estimation 2565
    - *Pinus strobus,* gibberellins, Canada 9855
    - *Tsuga mertensiana,* climate, increment, USA 2098
  - seed orchards, techniques, reviews 9428
  - squirrels, *Sciurus aberti, Pinus ponderosa,* USA 8359
  - variation
    - *Abies pindrow,* diameter, seeds, India 3388
    - *Picea smithiana,* diameter, seeds, India 3388
    - *Pinus sylvestris,* population genetics, Poland 7349
  - *Zamia furfuracea,* chemistry, toxins 3835
- **Conferences**
  - AAAP Animal Science Congress 4181
  - ACIAR 4181
  - Acidification of freshwater ecosystems: implications for the future 287
  - Adaptation in plant breeding 8493
  - Adaptation of tree breeding to changing circumstances and demands 7637, 7726, 7766, 7872, 8008, 8040-8041, 8184, 8233
  - Agroforestry and animal production for human welfare 4181
  - Agroforestry and land use change in industrialized nations 9324
  - Agroforestry and sustainable systems 9322
  - Agroforestry education and training: the Latin American perspective 5938
- **Conferences** *cont.*
  - Agroforestry: science, policy and practice 9325, 9356-9358, 10095-10106
  - Air pollutants and the leaf cuticle 2450
  - Allelopathy in agroecosystems (agriculture and forestry) 7318-7320, 7644
  - Alternatives to slash-and-burn agriculture 8491
  - Ameliorative practices for restoring and maintaining long-term productivity in forests 770, 892-896, 1089, 1095-1097, 1135-1136
  - American Chemical Society 746
  - Animal and plant genetic resources 2175-2176
  - Arable ecosystems for the 21st century 8640
  - Australian forestry and the global environment 6803
  - Australian Nitrogen Fixation Conference 6320-6321, 6620-6622
  - Australian tree species research in China 5941
  - Bamboo in Asia and the Pacific 5566, 5671, 9135
  - Barriers to the application of forestry research results 6805
  - Bases ecológicas para el desarrollo rural integrado y la lucha contra la desertificación en zonas áridas y semiáridas. Estudios de caso de América Latina 1383, 1504
  - Bases ecológicas para la gestión en ecosistemas terrestres 776
  - Basic and applied aspects of seed biology 9434-9437
  - Belowground responses to rising atmospheric CO_2: implications for plants, soil biota, and ecosystem processes 6263, 6423, 6432-6433, 6619, 6798
  - Biogeochemical monitoring in small catchments 6332-6334, 6539, 7879, 8020, 8419
  - Biology and control of reproductive processes in forest trees 9327, 9428-9430, 9785-9787, 9846-9849, 9869-9878, 9966
  - Biology of adventitious root formation 3403
  - Biotechnology assisted reforestation project 8483
  - Boreal forests and global change 9386-9387, 9489, 9494, 9502-9503, 9508, 9527, 9553, 9596, 9619-9622, 9770, 9866, 9941-9943, 9964-9965
  - Brighton crop protection conference, weeds 1730
  - Bundes-Kommunalwaldkongress 9329
  - Carbon cycling in boreal peatlands and climatic change 406-407
  - Changing tropical forests: historical perspectives and today's challenges in Central & South America 4150
  - Chemical weathering under field conditions 291-292, 344
  - Chemistry and fate of modern pesticides 8797
  - CIEC Symposium 9324
  - Climate variability and ecosystem response 2466
  - Climatic change in Austria 9328
  - Climatic change: significance for agriculture and forestry 2795-2797
  - Commonwealth Forestry Conference 19
  - Communal Forests in Germany 9329
  - Computers in agricultural extension programs 35-37
  - Congress of Croatian Biologists 5950
  - Congress on Products Gathered from Nature 8479
  - Conservation of tropical biodiversity 752
  - Conserving soil resources: European perspectives 7782
  - Contrasts between biologically-based process models and management-oriented growth and yield models 4179, 4207-4225, 4428-4429, 4751-4753
  - Critical loads: concept and applications 1905

Conferences *cont.*
  Crop structure and light microclimate: characterization and applications 5223
  Danish plant protection conference 7789
  Desiccation tolerance and sensitivity of seeds and vegetative plant tissues 839
  Disturbance dynamics in boreal forest 6800
  Dynamic behaviour of radionuclides in forests 4177
  Ecological basis for management of terrestrial ecosystems 776
  Ecological land classification: applications to identify the productive potential of southern forests 2469
  Ecological patterns and processes in European agricultural landscapes 8154, 8404, 8407, 8438, 8450-8452
  Ecology and landscape management in Sri Lanka 768, 921, 935, 1373-1375, 1578-1579
  Ecology, management and restoration of intermountain annual rangelands 5146-5147
  Ecology of mangrove and related ecosystems 16
  Economic results of private forestry in international comparison, and suitable forest technology for operations in forest smallholdings 773
  Economic valuation of benefits from countryside stewardship 8447
  Economic value of wilderness 2473
  Economics of the sustainable use of forest resources 20
  Ecophysiology and genetics of trees and forests in a changing environment 1606, 1609-1610, 1619-1621, 1659-1660, 1878-1882, 1887-1890, 1928-1930, 1932-1933, 1944, 2008-2010, 2014, 2031, 2035-2036, 2068-2070, 2172, 2206-2207
  Effects of forest practices on southern forested wetland productivity 6799, 6963, 7082, 7270, 7513, 7545-7546, 8152
  Efficiency of water use in crop systems 3618
  Elm Leaf Beetle Management Symposium 5787
  Elm leaf beetle management symposium 5788-5790
  Environment, development and poverty 6806
  Environmental and health aspects related to the production of aluminium 5329-5331
  Environmental and land use issues 8448
  Environmental aspects of energy forest cultivation 5942
  Environmental effects and their control in plant tissue culture 7741
  Erhaltung der Biodiversität 6808
  Erythrina in the new and old worlds 3309
  Ethnobotany and the search for new drugs 748
  Eucalypt plantations: improving fibre yield and quality 4182
  Experimental geomorphology and landscape ecosystem changes 8885, 9238
  Experimental manipulations of biota and biogeochemical cycling in forest ecosystems 3310, 3412-3415, 3574-3575, 3632, 3664-3666, 3752
  Festkolloquium anlässlich der Verabschiedung von Professor Dr Heinz Butin 5002
  Field margins: integrating agriculture and conservation 5848, 7643
  Fifth National Workshop on Agroforestry and Fodder Trees 8490
  Fire and the environment: ecological and cultural perspectives 2470
  Florida Keys regional ecosystem 6264, 6357, 6721
  Flow regimes from international experimental and network data 5835-5836

Conferences *cont.*
  Fodder trees and shrubs 8489
  Food systems under stress in Africa 1633
  Forest decline: known and unknown causes 3312
  Forest History Society 4150
  Forest products — wood quality 4584-4586, 4633-4637
  Forest resources and wood-based biomass energy as rural development assets 6790
  Forest Vegetation Management 7638
  Forestry and wildlife...towards the 21st century 4173, 4422-4423, 4910-4914
  Forestry research education in India 7624
  Forestry research in Zimbabwe 775
  Forestry research management 2481
  Forests and radioactivity 4177
  Frankia and actinorhizal plants 1909, 2064, 2230-2232, 2406
  Gene conservation and exploitation 2174
  Genetic improvement of trees and shrubs, pest/disease control, exchange, evaluation and joint testing for energy purposes 4999
  Genetics of oaks 3306
  Geologic Remote Sensing 9641
  German Society for General and Applied Entomology 2004, 2298, 2305, 2354-2355
  Global climate change and applied forest hydrology 3305
  Grasslands for our world 5000
  Grevillea robusta in agroforestry and forestry 2462
  Growth and yield estimation from successive forest inventories 5939, 5959, 6178-6180, 6192, 6210-6215
  Herbicide reduction efforts in North America: where do we go from here? 1762
  Highway pollution 1166-1168
  Hydrological and meteorological aspects of rainfall measurements and predictability 9765
  Impact of plant biotechnology on agriculture 7744, 9081
  Impacts of harvesting and site preparation on carbon cycling processes in forests 4175, 4489-4490, 4533-4535
  Improvement and silviculture of oaks 4180
  Improvement of coppice forests in the Mediterranean region 8486, 8612, 8614-8618, 8671, 8724-8725
  Improving natural resource management through monitoring 1607
  In harmony with nature 752
  India's forest management and ecological revival 6806
  Insect Pathogens and Insect Parasitic Nematodes 7430, 7471, 7488, 7501
  Institute of Foresters of Australia 6803
  Institute of Wood Science 9570
  Integrated river basin development 5830-5832
  Interacting stresses on plants in a changing climate 1597, 1893, 1970-1971
  Interamerican Society for Tropical Horticulture 9441
  International Association for Landscape Ecology 8154, 8404, 8407, 8438, 8450-8452
  International Association of Landscape Ecology Congress 766
  International Association of Wood Anatomists 1604
  International congress on hazelnut 1603
  International Energy Agency Bioenergy Agreement 4999
  International Grassland Congress 5000
  International horticultural congress 7741
  International Mire Conservation Group 6781
  International Plant Propagators' Society 2562, 2582-2583
  International Rubiaceae Conference 8484
  International Satellite Land Surface Climatology Project 4178

Conferences *cont.*
  International seed protein symposium 6499
  International Symposium on Forest Hydrology 15
  International workshop on halophytes for reclamation of saline wastelands and as a resource for livestock 7299, 7556
  ISAR support project on forestry and agroforestry 9323
  IUFRO 773, 1604, 1606, 3305-3306, 3311, 4150, 4169-4170, 4179-4180, 4182, 4207-4208, 4584-4586, 4633-4637, 5939, 8473, 9327, 9846
  IUFRO 20th World Congress 9325, 9356-9358, 10095-10106
  Josef Ressel, forester and inventor 2476
  Josef Ressel, Forstmann und Erfinder 2476
  Klimaänderung in Österreich 9328
  Kongressforum 'Holz' 4176
  Land use and biodiversity 8517, 8723, 9030
  Landscape approach to regional planning: the future of the Mediterranean landscapes 2640, 2893, 2913, 3025-3026, 3187
  Legume Conference 8487-8488, 8500, 8901-8906, 8958, 8971, 8975-8977, 9070, 9218, 9979
  Les dépérissements d'arbres forestiers. Causes connues et inconnues 3312, 3567, 3673, 3807-3822, 4019-4020, 4036, 4038
  Lokakarya nasional agroforestry 2475
  Long Ashton International Symposium 8640
  Long range transport, background monitoring, and effects on vegetation 6859-6860, 7091-7092
  Los eucalyptos en el desarrollo forestal de Chile 7794
  Maintaining biodiversity 6808
  Malaysian forestry and forest products research 777
  Management of longleaf pine 771
  Management of rain forest in Asia 6801
  Management of structure and productivity of boreal and subalpine forests 4174
  Managing forests for biodiversity 4998
  Measuring and modeling the productivity of pine forest ecosystems 6797
  Measuring and monitoring biodiversity in tropical and temperate forests 8473
  Medicinal plant research 8684-8685
  Mercury as a global pollutant 8795, 8851-8854
  Modern pollen rain and fossil pollen spectra 17
  Molecular evolution and mutation 9037
  Mountain hazard geomorphology 10088
  Multiple use forestry 6804
  Multipurpose tree species for agroforestry systems 2463
  Mycorrhizae and plant health 5590
  Mycorrhizas 5270, 5570-5577
  National agroforestry workshop 2475
  National congress on ornamental horticulture 1212
  National Seminar on Ethnobotany 9555
  Nature and dynamics of forest-savanna boundaries 4165
  Netherlands Mycological Society Flora Day 9084
  New cultivation systems in greenhouse 5120
  New Zealand Plant Protection Conference 8598, 8637-8638
  NGOs and tree-growing programs: working between farmers and goverments 774
  Non-CO_2 greenhouse gases: why and how to control? 4551
  North Central Weed Science Society 8643-8645
  Northeastern Weed Science Society 7645
  Nuclear analytical methods in the life sciences 5306, 5394

Conferences *cont.*
- Nutrient uptake and cycling in forest ecosystems 6802, 7646-7648, 7650, 7749-7755, 7759-7762, 7783, 7793, 7818-7819, 7826, 7862, 7888-7890, 7893, 7895, 7912-7913, 7919, 7923-7924, 7935-7937, 7950, 7954-7968, 7976, 7981-7983, 8000-8001, 8047-8048, 8097-8099, 8139, 8164-8166, 8256
- NZ plantation forestry — a sustainable resource 5990
- Oak regeneration: serious problems, practical solutions 2474
- Old growth forests 1605
- Open spaces for protection and improvement of the environment. The compatibility of agroforestry in protected areas 8481
- Opportunities for agroforestry in the temperate zone 8485, 8502, 8682, 9055, 9164, 9189, 9272-9278
- Organisation et fonctionnement des alterites et des soils 1899
- Organization and behaviour of alterites and soils 1899
- Paper and the environment 6159
- People, the environment and forestry — conflict or harmony? 19
- Pflanzenbedarf — Pflanzenanzucht — Pflanztechnik 5940
- Phenology and seasonality of woody plants: the effects of climate change 7639, 7864-7865, 8042-8043, 8126
- Photoinhibition 1291-1292
- Photosynthesis and stress 2075, 2079, 2090
- *Picea abies* network 8492
- *Pinus contorta* — from untamed forest to domesticated crop 4170
- Plant nutrition — from genetic engineering to field practice 901, 908, 1146-1148, 1288-1290
- Plant production on the threshold of a new century 7197
- Plant requirements — plant production — planting technique 5940
- Plants and people. Economic botany in Northern Europe AD 800-1800 5937
- Preparing to manage wilderness in the 21st century 2467
- Projet d'Appui à la Recherche Forestière et Agroforestière de l'ISAR 9323
- Promotion of non-wood forest produce through social forestry 14
- Protected area economics and policy: linking conservation and sustainable devlopment 7803
- Recherches-système en agriculture et développement rural 7834
- Regional expert consultation on farmer to farmer adaptive agroforestry research 2477
- Rehabilitation of degraded forest lands in the tropics 18
- Rehabilitation of degraded tropical forest lands 2479, 3232-3245
- Rehabilitation of the River Rhine 3281, 8994
- Research in photosynthesis 467-468, 1969, 2085-2086
- Research strategy for Indonesian bamboos 2480
- Response of plants to interacting stresses 1974-1977, 2460
- Riparian resources 7543
- Root and butt rots 3311
- Russian-Finnish seminar on thinnings 6810
- SAIF (Western Cape Branch) 48, 723-724, 739
- Sandalwood in the Pacific Region 4168
- Scandinavian Society of Forest Economics 2482
- Science, forests and sustainability 7640
- Sciences et industries du bois 765, 804, 929
- Seed symposium: seed development and germination 7641

Conferences *cont.*
- Selection of priority species of bamboo and rattan 7714
- Shoot diseases of conifers 4169
- Shortleaf pine regeneration 2464
- Side effects of pesticides (weeds) 7789
- Significance and regulation of soil biodiversity 7642, 7928-7929
- Silviculture conference 4172
- Silvipastoral systems in India 767
- Sound forestry — sustainable development 2484
- Southeastern Recreation Research Conference 2468
- Southern forest economics workshop on evaluating even and all-aged timber management options for southern forest lands 772
- Southern Forest Tree Improvement Conference 9326
- Southern plantation wood quality 2459
- Southern Silvicultural Research Conference 2465, 2471
- Southern Weed Science Society 1608, 1765, 1767-1769, 1873
- Sporoderm ontogeny and differentiation 5379-5381
- Stable isotopes and plant carbon-water relations 2834-2837, 2998-3002
- State forestry: the way forward 8482
- Strategi penelitian bambu Indonesia 2480
- Structure and function of roots 7072, 7151, 7185
- Sustainable animal production and the environment 1799
- Sustainable development strategies and global/regional/local impacts on atmospheric composition and climate 9759-9761
- Symposium on plant gene resources 7340
- Systematics and conservation evaluation 5921
- Systems Analysis in Forest Resources 2472
- Terrestrial biospheric carbon fluxes: quantification of sinks and sources of CO_2 2478
- The common ground of wild and cultivated plants: introductions, invasions, control and conservation 5003, 6148, 6758
- The price of forests 20
- The role of forest managers in the protection of natural landscapes 8480, 8557, 8717-8718, 9202
- The use of modern pollen-vegetation-environment relationships in the interpretation of fossil pollen spectra 17
- Third International Symposium on Plant-soil interactions at low pH 8003
- Third North American Agroforestry Conference 8485, 8502, 8682, 9055, 9164, 9189, 9272-9278
- Third Pacific regional wood anatomy conference 1604
- Toledo contributions to vegetation science 3307, 3332, 3705, 3871, 3942
- Tree breeding, population genetics and conservation of genes 3308
- Trees in the landscape 48, 723-724, 739
- Tropical cloud forests 4148
- United Nations conference on environment and development 769
- Valuing biodiversity 2483
- Variability in rangeland water erosion processes 7554
- Vegetation science in forestry: global perspective based on forest ecosystems of East and Southeast Asia 5922
- Vegetation structure and species coexistence 5001
- Water issues in forest today 15
- Weed science education: the cost of ignorance 170-173, 1608, 1765, 1767-1769, 1873
- Weed Science Society of America 1762, 8494

Conferences *cont.*
- White pine/red pine workshop 4171, 4247, 4316, 4354, 4377, 4383, 4420-4421, 4610, 4684, 4815, 4906
- Wirtschaftsergebnisse aus dem Privatwald im internationalen Vergleich und angepasste Forsttechnik für die Bewirtschaftung kleiner Besitzeinheiten 773
- 'Wood' Congress Forum 4176
- Wood sciences and industries 765, 804
- Working Group on Fodder Trees, Forest Fodder and Leaf Litter 2461
- Workshop on *Acacia* symbioses 6807
- World Congress of Soil Science 8778, 8785-8787, 9288
- World congress on medicinal and aromatic plants for human welfare 982-983

Congo
- *Acacia,* forest plantations, biomass production, plant composition, major elements 6980
- broadleaves, forest litter, decomposition, soil organic matter 1912
- *Eucalyptus,* forest plantations, forest policy, rural economy 8534
- tropical forests, forest management, planning 8519

Conifers
- air pollution
  - forest health, France, history 3673
  - plant physiology, reviews, field experimentation, growth chambers 5956
  - sulfur dioxide, photosynthesis, reviews 1957
- biogeochemistry, acid deposition, throughfall, soil chemistry, Europe 3664
- birds, *Nucifraga caryocatactes,* seed dispersal, Germany 1307
- boreal forests, dendroclimatology, Arctic Regions 4140
- branches, pruning, seed orchards, reviews 9528
- canopy, light penetration, simulation 5223
- cones, development, reviews 2050
- crown
  - morphology, stress factors, adaptation 3723
  - pruning, seed orchards, reviews 9528
- deforestation, nature conservation, Chile 3253
- dendrochronology, North America 3292
- essential oils, New Zealand 1806
- fertilizers, irrigation, acid deposition, Europe 3632
- flowers, development, reviews 2050
- forest management, multiple use, biodiversity, New Zealand 6744
- forest nurseries, bare rooted stock, weed control, management, surveys 9482
- forest plantations
  - forest economics, New Zealand, Korea Republic, foreign investment 8747
  - site class assessment, statistical analysis, Argentina 225
  - stand density, growth models, equations 9586
  - weed control, Russia 2642
- fungal diseases
  - *Botryodiplodia theobromae*
    - seeds
      - reviews 603
      - South Africa 603
  - *Diplodia pinea,* Netherlands 1453
  - *Gremmeniella abietina* 4169
  - *Rhizoctonia*
    - forest nurseries
      - Finland 5620
      - Norway 5620
- insect pests
  - *Choristoneura fumiferana*
    - biological control 675
    - stand development, simulation, Canada 4224
  - *Cinara,* Bulgaria 631

Conifers *cont.*
- insect pests *cont.*
  - *Cinara setosa,* Italy, morphology 9142
  - *Dendroctonus brevicomis,* USA 7475
  - *Dioryctria abietella,* India, biology 5730
  - *Hylobius abietis,* behaviour 2347
  - *Hylobius warreni,* Canada, reviews 7467
  - Lepidoptera
    - defoliation, Canada 4047
    - foliage, terpenoids, Canada 9146
  - *Orgyia pseudotsugata,* Canada, control 5797
  - seed orchards, Canada, pest management 6667
- introduced species, insect pests, Kazakhstan 10034
- mycorrhizas, forest nurseries, afforestation, France, plant nutrition 5576
- nature conservation, arboreta, UK 6758
- palaeoecology, stomata, Canada 8146
- plant development, juvenility, maturation, reviews 9785
- plant parasitic nematodes
  - *Bursaphelenchus xylophilus*
    - spread, wood chips, survival 5778
    - USSR, spread, risk 9183
- planting stock, cold storage, research, reviews 4310
- pollen, morphology, pollination 4645
- regeneration surveys, Canada, techniques 248
- seed germination
  - Canada, stratification, light 4270
  - seed treatment, dormancy breaking, techniques 1684
- seeds, immunology, legumin 2969
- shoot cuttings, reviews 96
- shoots, structure, photosynthesis, light, carbon dioxide 8109
- somatic embryogenesis, biochemistry, reviews 4287
- thinning, forest plantations, France, planning, forest economics 2654
- tissue culture, cell suspensions, cellular biology 5945

Conocarpus, palaeobotany, America, reviews 6528

Conocarpus erectus
- mangroves, geographical distribution, Mexico 7264
- rhizosphere, soil biology, microorganisms, Cuba 1107

Conophthorus radiatae, insect pests, *Pinus radiata,* USA, disease vectors 7400

Conotrachelus retentus, insect pests, *Juglans nigra,* USA 9164

Conservation
- landscape ecology, land use, Sri Lanka, conferences 768
- tropical forests, deforestation 5891

Container grown plants
- forest nurseries, growing media, peat, soil water movement 6901
- growing media, peat, soil water movement 6902

Contour cultivation
- multipurpose trees
  - direct sowing, establishment, erosion control, Nicaragua 4945
  - fodder, biomass production, Sri Lanka 1799

Contour ridging
- *Eucalyptus,* water harvesting, Israel, slope, aspect 9511
- *Leucaena leucocephala,* agroforestry, India 2421
- site preparation, Ukraine 938

Controlled burning (*see also* Site preparation, burning)
- *Acacia,* weed control, grasslands, Uganda 5362
- *Acer saccharum,* soil, insect pests 4033
- caatinga, biogeochemistry, Brazil, nutrients 2922
- ecology, *Pinus palustris,* ground vegetation, USA 7135
- *Eucalyptus pauciflora,* soil biology, microorganisms, Australia 7927

Controlled burning *cont.*
- *Eucalyptus regnans,* soil pH, seed germination, Australia 5365
- *Eucalyptus sieberi,* secondary forests, simulation, Australia 2497
- fire ecology
  - birds, USA, mixed forests 6380
  - forest management, Australia, reviews 3697
- fire prevention, decision making, nature reserves, Australia 7134
- forest management, silviculture, Canada 2002
- forest trees, forest litter, cellulose, decomposition, Portugal 7140
- fynbos, resource management, South Africa, biodiversity 529
- insects, Formicidae, *Eucalyptus,* Australia 378
- *Melaleuca viridiflora,* stand structure, epiphytes, Australia 3089
- mixed forests, soil chemistry, logging, USA 9689
- mycorrhizas, *Abies,* thinning, USA 3145
- *Picea abies,* soil biology, Finland 5273
- *Pinus*
  - forest management, Canada 4610
  - soil biology, microorganisms, Spain 8883
  - stand characteristics, forest recreation, USA 6378
- *Pinus contorta*
  - site preparation, artificial regeneration, Canada 8880
  - vegetation management, edible species, Canada 374
- *Pinus muricata,* soil water, infiltration, USA 6382
- *Pinus palustris,* soil, USA, growth effects 5363
- *Pinus strobus,* site preparation, plant physiology, USA 1270
- *Pinus taeda*
  - thinning, USA, mortality 176
  - understorey, species diversity, USA 1765
- *Populus tremuloides,* vegetation management, edible species, Canada 374
- research, USA, history 2532
- *Sapium sebiferum,* woody weeds, biomass production, USA 2696
- sclerophyllous forests, soil fauna, Australia 6376
- site preparation, Canada 8629
- *Vaccinium,* vegetation management, edible species, Canada 374
- watershed management, fynbos, South Africa, mountain areas 1193
- weed control, woody weeds, Australia, *Mimosa pigra* 1761
- woody weeds, control, *Pinus taeda,* USA 6125

Cooperatives
- forest resources, forest management, rural economy, Developing Countries 4463
- forestry, France 9659
- history, Germany 4235

Copaifera langsdorfii, gas exchange, plant water relations, water stress 5407

Copaifera officinalis
- species trials, reclamation, mined land, Venezuela 6711
- wood anatomy, wood properties 6428

Copaiferoxylon matanzensis, old and fossil wood, wood anatomy, Mexico 2022

Copal, production, *Agathis,* resin tapping, Indonesia 969

Coppice
- *Acer saccharinum,* biomass production, plant water relations, USA 6096
- *Albizia lebbeck,* biomass production, India 8620
- *Arbutus unedo,* plant competition, biomass, Spain 3865
- *Betula pubescens,* buds, dormancy, plant physiology, seasonal variation 1209
- broadleaves
  - France, research, growth, ecology 8614
  - Italy, research 8616

Coppice *cont.*
- broadleaves *cont.*
  - plant succession, France 4317
  - Portugal, forest resources 8612
  - silvicultural conversion
    - Greece, geographical distribution, management 8618
    - plant physiology, Italy 8935
  - stand structure, snow damage, Japan 6267
- *Calliandra calothyrsus,* shoot cuttings 1692
- *Castanea sativa*
  - biomass production, France, equations 4398
  - stand characteristics, logging, Italy, temporal variation 8611
  - stand structure, Italy 9535
- *Eucalyptus,* understorey, synecology, India 522
- *Fagus sylvatica*
  - silvicultural conversion
    - Croatia 4319
    - Italy, stand structure 8602
  - forest management
    - Italy
      - multiple use 8724
      - reviews 8617
- growth, *Dalbergia sissoo,* India 1737
- logging
  - France, work study 6914
  - Italy, damage 8671
- management
  - *Castanea sativa,* agroforestry, France 5877
  - *Prosopis juliflora,* irrigated stands, Kenya 6094
  - *Quercus,* agroforestry, France 5877
- *Ostrya carpinifolia,* yield tables, Italy 2711
- *Populus* 'Beaupré', silviculture, France, biomass production 149
- *Populus* 'DN-74', thinning, Canada 148
- *Prosopis,* wood properties, Argentina 7119
- *Quercus*
  - France, research 8615
  - silvicultural conversion, Greece, geographical distribution, management 8618
  - Spain, resources, management 8613
- *Quercus cerris*
  - silvicultural conversion
    - Italy 8608
      - forest litter, leaf area index 8664
      - leaf area index, estimation 8898
    - plant physiology, Italy 8935
    - soil properties, Italy 8792
    - stand structure, Italy 8609-8610
- *Quercus rubra*
  - plant physiology 4687
    - USA 4686
- *Quercus serrata,* forest fragmentation, biodiversity, Japan 8403
- *Salix*
  - buds, shoots 6392
  - foliage, UK, demography 6097
- savanna woodlands
  - clear felling, Burkina Faso, regeneration 7768
  - increment, Burkina Faso 6095
- stand improvement, Mediterranean Region, conferences 8486

Coppicing
- *Acacia,* species trials, Malawi 1670
- *Betula pubescens,* sap flow, cytokinins, growth 3804
- *Populus maximowiczii* × *Populus nigra,* shoots, photosynthesis, plant nutrition, carbohydrates 7195
- *Robinia pseudoacacia,* genetic variation, suckering, USA 2211

Coptotermes formosanus, insect pests, *Azadirachta indica,* resistance 9137

Coptotermes heimi, insect pests, *Eucalyptus tereticornis,* India 2309

Cordia, secondary forests, selective felling, planning, sustainability, Venezuela 5122

- ***Cordia africana,*** water stress, stomata, responses 5278
- ***Cordia alliodora***
  - mycorrhizas
    - *Acaulospora,* seedling growth 1444
    - *Entrophospora colombiana,* seedling growth 1444
    - *Glomus,* seedling growth 1444
  - phenology, flowering, fruiting, Venezuela 5368
  - plant nutrition, Costa Rica, growth 5130
  - plant water relations, drought, phenology, Costa Rica 2838
  - population genetics
    - gene flow, Costa Rica 6599
    - genetic variation, isoenzymes, Central America 6597
    - reproductive behaviour, mating systems, Costa Rica 6598
  - rain forests, Mexico, wood anatomy 1211
  - reproductive behaviour, incompatibility, flowers, morphology, variation 8123
  - shoot cuttings, Colombia 879
  - species trials, agroforestry, soil properties, soil types, Nigeria 6868
  - understorey, plant competition, Costa Rica 6559
- ***Cordia boissieri,*** soil surveys, matorral, Mexico 301
- ***Cordia collococca,*** species trials, reclamation, mined land, Cuba 1540
- ***Cordia elaeagnoides,*** deciduous forests, forest litter, Mexico 293
- ***Cordia gerascanthus,*** shoot cuttings, Colombia 879
- ***Cordia nodosa,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Cordia sinensis***
  - browse, indigenous knowledge, Kenya 6669
  - water harvesting, savanna woodlands, rehabilitation, Kenya 6120
- ***Cordia subcordata,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- ***Cordyline australis,*** mycoplasmal diseases, New Zealand 4875
- ***Coriaria,*** reproductive behaviour, self compatibility, inflorescences 8957
- ***Coriaria arborea,*** root nodules, enzyme activity, nitrogenase 2064
- ***Coriaria myrtifolia,*** shoots, fire ecology, plant physiology, Spain 9775
- ***Coriaria nepalensis***
  - biomass production, India, equations 789
  - root nodules, *Frankia,* ultrastructure 3150
  - seeds, storage, seed germination, reclamation, India 79
  - shoot cuttings, erosion control, India 95
- ***Coriolus versicolor,*** fungal diseases, *Platanus acerifolia,* injuries, inoculation 8290
- **Cork**
  - *Quercus suber,* biomass, forest litter, increment, Spain 1825
  - yields, quality, *Quercus suber,* Spain 7800
- ***Cornus***
  - fungal diseases
    - *Discula destructiva*
      - ornamental woody plants, USA, resistance 8311
      - reviews 7406
    - *Nectria cinnabarina,* USA, chemical control, testing 2293
- ***Cornus alba,*** taxonomy, plant morphology, habit, Poland 2115
- ***Cornus capitata,*** forests, synecology, stand structure, natural regeneration, India 2167
- ***Cornus controversa***
  - monkeys, *Macaca fuscata,* seed production, Japan 689
  - pioneer species, topography, plant morphology, Japan 8765
  - roadside plantations, forest influences, air pollution, Japan 7126
  - wood anatomy, Japan, growth effects 7115
- ***Cornus florida***
  - control, woody weeds, herbicides, USA 1766
  - frost injury, parenchyma, ice, cavitation 275
  - fungal diseases
    - *Discula*
      - acid deposition, foliage, morphology 2279
      - histology 2278
    - *Discula destructiva*
      - irrigation, USA 4868
      - USA, statistical analysis 9351
    - *Irpicomyces cornicola,* Japan 2252
  - insect pests
    - *Synanthedon scitula,* USA, biological control 2374
    - USA, canopy gaps, phenolic compounds 2306
  - ornamental woody plants, provenance trials, USA 5910
  - plant physiology, drought, USA, plant ecological groups 8813
  - plant succession, old fields, site requirements 3102
  - planting stock, lifting, USA 1732
  - tissue culture, explants, culture media 1703
- ***Cornus mas,*** seed germination, seed treatment, Poland 857
- ***Cornus peruviana,*** geographical distribution, seed dispersal, birds, Colombia 1327
- ***Cornus sanguinea***
  - plant nutrition, riparian forests, flooding, France 3640
  - plant water relations, stomatal resistance, abscisic acid, Germany 2083
- ***Cornus sericea***
  - buds, dormancy, stems, cold tolerance, heat stress 7037
  - frost resistance, seasonal variation 272
  - planting stock
    - shoot cuttings
      - storage
        - carbohydrates 138
        - plant growth regulators 138
- **Corsica**
  - broadleaves, agroforestry 5883
  - deer, *Cervus elaphus,* browsing damage, sclerophyllous scrub 7525
  - *Pinus nigra,* population genetics, isoenzymes 2187
- ***Corthylus punctatissimus,*** insect pests, *Acer,* USA 5743
- ***Corticium salmonicolor,*** fungal diseases, *Eucalyptus camaldulensis,* Bangladesh, cankers 6633
- ***Cortinarius hedyaromaticus,*** mycorrhizas, *Populus tremuloides,* USA 601
- ***Cortinellus edodes*** (*see Lentinula edodes*)
- **Corvidae,** birds, landscape, Sweden, behaviour, predation 694
- ***Corylus avellana***
  - air pollution, plant water relations 7090
  - birds, *Bonasa bonasia,* Belgium, stand characteristics, habitats 10068
  - conferences 1603
  - edible fungi, *Tuber melanosporum,* mycorrhizas, biological competition 5575
  - forest plantations, truffles, production, economics, Spain 1807
  - fungal diseases, *Anisogramma anomala* 8312
  - insect pests, *Alnetoidia alneti,* UK 5690
  - insects, Lepidoptera, Finland, food plants 2299
  - mixed forests, natural regeneration, synecology, Poland 8179
  - mycorrhizas
    - chemistry 8274
    - *Tuber*
      - interface, ultrastructure 4001
      - irrigation 5613
      - polyphenols 6611
    - *Tuber magnatum,* Italy 6609
  - pruning, foliage, polyamines 6436
  - seeds, cryopreservation 5102
  - squirrels, *Sciurus,* UK, competitive ability 2389
- ***Corylus avellana*** *cont.*
  - taxonomy, plant morphology, habit, Poland 2115
- ***Corylus colurna***
  - bare rooted stock, transplanting, water stress, antitranspirants, defoliation 5286
  - ornamental woody plants, transplanting, drought, root hydraulic conductivity 6755
  - phenology
    - roots, transplanting 5908
    - USA 6390
  - taxonomy, plant morphology, habit, Poland 2115
  - transplanting, USA, survival, seasonal variation 5907
- ***Corylus maxima,*** shoot cuttings, rooting, lasers 5077
- ***Corylus sieboldiana,*** wood chemistry, extractives, chemotaxonomy 4664
- **Cossidae,** insect pests, *Heritiera utilis,* Africa, damage, surveys 10030
- ***Cossus cadambae***
  - insect pests
    - *Tectona grandis*
      - India 2332
        - biology 2317
        - damage 2317
- **Cost analysis**
  - forest inventories, sampling, Switzerland 6219
  - nature conservation, forest management, Germany 1582
- **Costa Rica**
  - afforestation, choice of species 9423
  - agroforestry
    - choice of species 9423
    - development projects, databases 10109
  - Arecaceae, height, foliage, morphology 5376
  - birds
    - dead trees, vegetation types 1515
    - plant succession, secondary forests 4923
  - *Bombacopsis quinata,* growth models 218
  - broadleaves
    - buds, phenology, plant water relations 2929
    - increment, diameter, variation, climate 1841
    - plant water relations, drought, phenology 2838
    - respiration 8929
    - understorey, plant competition 6559
  - browse, digestibility 970
  - *Buchenavia costaricensis,* taxonomy 6520
  - *Casuarina cunninghamiana,* growth models 219
  - *Cedrela salvadorensis,* foliage, flavonols 9828
  - choice of species 2558
  - cloud forests, soil organic matter, soil physical properties 6276
  - *Cordia alliodora*
    - plant nutrition, growth 5130
    - population genetics
      - gene flow 6599
      - reproductive behaviour, mating systems 6598
  - *Cupressus lusitanica,* yield tables 6986
  - deforestation
    - economic policy 8544
    - land use, plant succession, soil properties 2154
    - nitrogen cycle, greenhouse effect, estimation 2409
    - remote sensing 718
    - soil organic matter, soil chemistry 290
  - degraded forests, soil properties, afforestation 8390
  - *Dichapetalum,* taxonomy, new species 8962
  - endophytes
    - *Albosynnema elegans, Poulsenia armata,* branches 9067
    - *Solheimia costaspora, Inga goldmanii,* branches 9067

Costa Rica *cont.*
- *Erythrina poeppigiana*
  - gas exchange, simulation, growth, environmental factors 5411
  - pruning
    - nutrition physiology, nitrogen fixation 9733
    - root nodules, effects 9991
- *Eucalyptus deglupta*
  - foliage, progeny testing 9985
  - height, progeny testing 9985
- *Eucalyptus saligna,* growth models 222
- forest ecology
  - epiphytes, cloud forests 3091
  - forest litter, soil fauna, Formicidae 5676
- forest plantations, choice of species 9423
- forest policy, deforestation 6852
- forest trees
  - afforestation, pastures, stem form, growth 5051
  - crown, buttresses 2958
  - photosynthesis, foliage, age 6493
  - soil chemistry, nitrogen, mineralization 5247
  - stems, water storage, tropical forests 4521
- Formicidae, sampling, tropical forests 21
- fungal diseases, *Burenia myrrhidendri, Myrrhidendron donnell-smithii,* fruits 9121
- *Galipea dasysperma,* taxonomy 3850
- *Gmelina arborea,* soil chemistry, nutrient deficiencies, site factors 4546
- *Heliocarpus appendiculatus,* wood density, wood anatomy 8900
- improvement planting, choice of species 9423
- *Inga*
  - nectar, chemistry 2983
  - seedlings, understorey, plant competition 548
- insect pests
  - *Atta cephalotes, Rinorea deflexiflora,* predators, *Paraponera clavata* 6661
  - *Hypsipyla grandella, Cedrela odorata,* nutrient reserves, starch 6654
- mites
  - *Proctolaelaps kirmsei*
    - *Hamelia patens*
      - nectar, consumption 10051
      - pollen, consumption 10052
- mountain forests, secondary forests, synecology 3901
- mycorrhizas, inoculum, soil types, bioassays 5271
- natural regeneration, canopy gaps, light intensity, rain forests 1409
- nature conservation, choice of species 9423
- nature reserves, forest recreation, valuation 8445
- nitrogen fixing trees, soil chemistry, nitrogen, mineralization 5247
- *Ocotea tonduzii,* epiphytes, cloud forests 1389
- *Pentaclethra macroloba,* genetic variation, gene flow 3139
- phytogeography, subalpine forests, Guatemala 6537
- *Pinus caribaea,* forest plantations, research 953
- private forestry, forest management, sustainability, economics 5219
- *Quassia simarouba,* sex, forest influences, soil chemistry, phosphorus 5350
- *Quercus*
  - mountain forests
    - deforestation, agroforestry 7575
    - plant succession, species diversity 5460
- rain forests
  - epiphytes 4784
  - forest influences, soil air, nitric oxide 8873
  - soil properties, synecology 2154
- Rubiaceae, taxonomy 7239

Costa Rica *cont.*
- secondary forests, soil properties, synecology 2154
- *Senecio cooperi,* epiphytes, plant nutrition, adventitious roots 3732
- species trials, broadleaves 4262
- stumpage value, forest economics, discount rates, cash flow 9654
- *Swietenia macrophylla,* afforestation, stand establishment, biomass distribution, root systems 9530
- tropical forests, nature conservation 1581
- turtles, *Rhinoclemmys,* vegetation types, seed dispersal 6515

Costs, forestry workers, Slovenia 7710

Côte d'Ivoire
- *Acacia,* nitrogen fertilizers, nutrient allocation 3408
- forest management, organizations 8721
- forest trees, population dynamics, savannas, simulation 2511
- forestry, economic resources, degradation, conservation 2522
- fungal diseases
  - *Heritiera utilis,* damage, surveys 10030
  - *Khaya,* damage 6647
- *Gliricidia sepium*
  - agroforestry
    - microclimate, crops, plant diseases 8431
    - roots, dynamics, plant competition 8425
- *Heritiera utilis,* forest plantations, silviculture 9495
- insect pests
  - Cerambycidae, *Heritiera utilis,* damage, surveys 10030
  - Cossidae, *Heritiera utilis,* damage, surveys 10030
  - *Khaya,* damage 6647
- *Khaya,* forest plantations, silviculture, growth, yield forecasting 4333
- multipurpose trees
  - agroforestry, land use 8423
  - inventories, shade trees, plantations 4116
- mycorrhizas, *Acaulospora excavata, Terminalia* 600
- rain forests, synecology, species diversity, ecotones 9923
- root nodules
  - *Bradyrhizobium, Acacia mangium,* soil properties, growth 9069
  - *Rhizobium, Acacia mangium,* soil properties, growth 9069
- savannas, synecology, species diversity, ecotones 9923
- tropical forests
  - canopy gaps, characteristics 1334
  - forest management, planning 8519

Cotoneaster dammeri, foliage, chemistry, chlorinated hydrocarbons, measurement 9334

Cotoneaster divaricatus, seed germination, seed treatment 2562

Cotylelobium burckii, tissue culture, Brunei Darussalam 6893

Couroupita guianensis
- essential oils, flowers 6441
- flowers, India, biology 9867

Cover crops, broadleaves, mulching, USA 5113

Cowania mexicana, root nodules, inoculation 4841

Crabs
- mangrove forests, soil biology, Australia 7058
- *Sesarma meinerti,* mangroves, forest litter, degradation, South Africa 1523
- wildlife, mangroves, natural regeneration, Bangladesh 7257

Crataegosorbus miczurinii, tissue culture, explants, culture media 109

Crataegus
- birds, *Lanius,* Spain, ecology 8373
- insect pests, *Paropsides soriculata,* China, biology 9166

Crataegus calycina, bacterial diseases, *Erwinia amylovora,* flowering, Netherlands, control 612

Crataegus douglasii, insect pests, *Rhagoletis pomonella,* USA, parasitoids 5771

Crataegus laevigata, bacterial diseases, *Erwinia amylovora,* flowering, Netherlands, control 612

Crataegus monogyna
- bacterial diseases, *Erwinia amylovora,* flowering, Netherlands, control 612
- foliage, morphology, taxonomy 2960
- insect pests, *Rhagoletis pomonella,* USA, parasitoids 5771
- seed germination, seed treatment 2562

Crataegus oxyacantha *(see Crataegus laevigata)*

Crataegus phaenopyrum
- insect pests, *Aphis,* biological control, natural enemies 4899
- planting stock, storage, plant water relations, desiccation 6073
- street trees, planting, water uptake 4510

Crematogaster
- insect pests
  - rain forests, Australia, ecology 662
  - sclerophyllous forests, Australia, ecology 662

Crescentia alata, species trials, India 1673

Criodion angustatum, insect pests, Argentina 2301

Croatia
- *Abies alba,* forest decline, forest economics 4719
- afforestation, history 2476
- *Betula pendula,* stand characteristics, silviculture 4363
- bottomland forests, natural regeneration, wild pigs, agroforestry 3268
- broadleaves
  - forest decline, mountain forests 4722
  - stand development, wetlands, simulation 4807
- *Fagus sylvatica*
  - coppice, silvicultural conversion 4319
  - stand structure, increment 4404
- fungal diseases, *Pinus,* forest plantations 4855
- insect pests, *Curculio, Quercus robur,* seeds 4891
- marshes, synecology 4775
- ornamental woody plants 4987
- *Pinus,* forest plantations, soil formation 4602
- *Quercus petraea,* vegetation types, synecology, mountain forests 4774
- *Quercus robur*
  - foliage, development, genetic variation 4616
  - forest decline
    - bottomland forests, environmental factors 4726
    - silvicultural conversion 6502
    - silviculture 4725
    - stand characteristics 4724
  - natural regeneration 4808
  - stumpage value, forest decline 4459
- remote sensing, infrared photography, mensuration 4453
- vegetation types, synecology 4778
- volume tables, regression analysis 4414
- wildlife, *Castor fiber,* habitats 4926

Cronartium coleosporioides, fungal diseases, *Pinus contorta,* stand density, Canada 6631

Cronartium comandrae
- fungal diseases
  - *Pinus contorta*
    - oleoresins, increment 7206
    - resistance, *Dendroctonus ponderosae* 7205
    - stand density, Canada 6631

Cronartium conigenum, fungal diseases, *Pinus maximinoi,* cones, Guatemala, histology 9090

Cronartium flaccidum, fungal diseases, *Pinus,* tissue cultures, disease resistance 9112

Cronartium fusiforme
- fungal diseases
  - *Pinus*
    - plant composition, monoterpenoids, resistance 9107
    - silviculture, USA 10021

- ***Cronartium fusiforme*** *cont.*
  - fungal diseases *cont.*
    - *Pinus cont.*
      - USA, assessment 3167
    - *Pinus elliottii*
      - silviculture, USA 4024
      - simulation, USA 7676
      - USA, resistance 2188
    - *Pinus taeda*
      - forest nurseries, control 4025
      - tree breeding, USA 7346
      - USA, population genetics 2274
- ***Cronartium ribicola***
  - fungal diseases
    - *Pinus albicaulis*
      - forest decline, USA 470
      - natural regeneration, USA 9105
    - *Pinus cembra,* Romania, hybrids, disease resistance 2186
    - *Pinus lambertiana,* disease resistance, molecular genetics 9114
    - *Pinus wallichiana,* genetic resistance, progeny testing 5490
- ***Crossopteryx febrifuga,*** population dynamics, savannas, Côte d'Ivoire, simulation 2511
- ***Crotalaria incana,*** seed dormancy, temperature, moisture, Mexico 2575
- ***Croton,*** choice of species, forestry development, South America 2551
- ***Croton aubrevillei,*** essential oils, Central Africa, volatile compounds 9802
- ***Croton megalocarpus,*** agroforestry, species trials, Rwanda 4961
- ***Croton niveus,*** deciduous forests, synecology, soil properties, climate, Venezuela 1370
- ***Croton zambesicus,*** essential oils, Central Africa, volatile compounds 9802
- **Crown**
  - *Abies sachalinensis,* computer techniques 1624
  - age, *Pinus sylvestris,* Russia 4388
  - asymmetry, forest trees, buttresses, Central America 2958
  - *Betula platyphylla,* biomass, Japan, measurement 1843
  - broadleaves
    - canopy, plant morphology 8065
    - foliage, light intensity, plant morphology, development 2014
    - Japan, branches, development, morphology 9795
  - competition, broadleaves, USA, growth 2692
  - conifers
    - light, interception, USA 3733
    - pruning, seed orchards, reviews 9528
    - selection forests, stand structure, Japan 4360, 6824
    - spacing, Canada, growth 4331
  - *Cryptomeria japonica*
    - light
      - Japan 1777
      - simulation, Japan 1782
    - plant morphology, mathematics 6435
    - stems, Japan, growth 8698
    - thinning
      - biomass, simulation 4352
      - light, simulation, Japan 1773
  - development
    - *Fagus sylvatica,* light, France 6387
    - phenology, foliage, photosynthesis, theory 8042
    - *Picea abies,* thinning, simulation 795
    - *Pinus resinosa,* increment, spacing, Canada 1225-1226
    - *Pinus sibirica,* liberation felling, Russia 9518
    - *Pinus taeda,* thinning, simulation, USA 5148
    - *Pseudotsuga menziesii* 411
      - foliage, abscission 7163
  - *Fagus sylvatica,* increment, forest decline, Switzerland, simulation 8944
  - forest decline, forest trees, Italy 3025
  - forest trees
    - forest decline, Italy, assessment, methodology 5951
    - growth models, volume 4219
- **Crown** *cont.*
  - forest trees *cont.*
    - morphology 404
    - reproductive behaviour, forest decline, UK 3033
  - *Fraxinus excelsior,* branches, France 6186
  - morphology
    - conifers
      - simulation 4218
      - stress factors, adaptation 3723
    - forest trees, simulation 798
    - *Fraxinus excelsior,* growth models, France, measurement 9585
  - *Nothofagus pumilio,* Argentina, equations 6170
  - orientation, broadleaves, light, canopy gaps, Mexico 7023
  - *Pinus sylvestris*
    - age, photosynthesis, light, Poland 1278
    - plant nutrition, foliage, age, Finland 3622
    - plus trees, tree breeding, phenotypic selection, Finland 7345
    - thinning, Finland, simulation 8649
  - *Pinus taeda*
    - branches, simulation, USA 6187
    - thinning, fertilizers, USA 2011
    - wind damage, USA, simulation 9680
  - *Pinus thunbergii,* Japan, dimensions, fractal geometry 9339
  - position, broadleaved evergreen forests, increment, stem form, South Africa 224
  - *Pseudotsuga menziesii,* genetic variation, USA, increment 2183
  - shape, forest trees, light, theory 3713
- ***Crudia balachandrae,*** taxonomy, India, new species 8968
- **Cruising** (*see* Forest inventories)
- **Cryopreservation,** *Picea sitchensis,* tissue culture, somatic embryogenesis 7745
- ***Cryphonectria cubensis,*** fungal diseases, *Eucalyptus grandis,* pathogenicity 2271
- ***Cryphonectria parasitica***
  - fungal diseases
    - *Castanea,* enzyme activity 9109
    - *Castanea dentata*
      - hypovirulence 9110
      - North America 9108
      - USA 8302
        - hypovirulence 6635
    - *Castanea sativa*
      - aerial photography, Switzerland 7854
      - biological control
        - Europe 7412
        - Italy, hypovirulence 9126
        - Slovakia 8321
      - Germany 5648
      - Italy, grafting 6634
- ***Cryptocarya caesia,*** endangered species, India 9896
- ***Cryptocephalus pini,*** insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
- ***Cryptococcus,*** fungi, isolation, *Eucalyptus,* human diseases, Colombia 7713
- ***Cryptococcus fagisuga***
  - insect pests
    - *Fagus,* North America, fungal diseases, *Nectria* 7401
    - *Fagus sylvatica,* bark, proteins, Germany 1480
- ***Cryptodiaporthe salicella,*** *Salix,* Sweden 5643
- ***Cryptolepis sanguinolenta,*** medicinal plants, antiprotozoal agents 8691
- ***Cryptomeria japonica***
  - acid deposition, stemflow, soil chemistry, Japan 7999
  - air pollution, simulation, growth 9747
  - branches, wood strength, Japan, testing 4632
  - breeding programmes, Japan 8192
  - canopy, stand structure, Japan, growth, plant morphology 6970
  - chloroplast genetics, evolution 9037
- ***Cryptomeria japonica*** *cont.*
  - clones
    - genetic variation
      - wood anatomy 6587
      - wood chemistry, Japan 7341
    - wood anatomy, growth rings, genetic variation 4591
  - crown
    - light
      - Japan 1777
      - simulation, Japan 1782
    - plant morphology, mathematics 6435
    - stems, Japan, growth 8698
  - dendrochronology, Japan, history 4139
  - differentiation, cell walls, polysaccharides 7173
  - essential oils, foliage, Japan, seasonal variation 6445
  - foliage
    - chemistry, terpenoids 4671
    - sesquiterpenoids 8910
  - forest influences, streams, Japan, chemistry 4599
  - forest plantations
    - biomass production, plant composition, India 3482
    - forest influences, carbon cycle, soil chemistry, Japan 7047
    - stems, wind damage, plant morphology, Japan 4479
    - woody weeds, plant competition, height, diameter 6126
  - fungal diseases
    - *Chloroscypha seaveri,* Japan, ecology, pathogenicity 9116
    - *Gloeosporidina cryptomeriae,* Japan, damage, symptoms 4864
  - gene mapping 8225
  - genetic variation
    - wood moisture, heartwood, Japan 6592
    - wood properties
      - clones, spacing 9758
      - Japan 560
  - growth models
    - Japan 1836
      - volume 6176
  - growth rings
    - distribution, simulation 4194
    - wood chemistry, dendrochronology 7616
  - growth stress, cell walls 1177
  - heartwood
    - injuries, discoloration, wood chemistry, trace elements 8092
    - sapwood, Taiwan, formation 6395
  - insect pests
    - *Aspidiotus cryptomeriae,* Japan 9144
    - *Callidiellum rufipenne,* Japan 7466
    - Cerambycidae, Japan, attractants 4040
    - *Semanotus japonicus,* Japan, behaviour, ecology 2339
    - *Xyleborus validus,* Japan 7474
  - juvenile wood, distribution 7122
  - light, canopy, Japan, leaf area index 4468
  - lignin, biosynthesis, cell walls, peroxidases 1246
  - logging, forest roads, Japan, access 9603
  - natural layering, light, snow, Japan 4326
  - pollen
    - allergens 6008
      - dispersion, simulation, Japan 7217
      - Japan 5046
      - localization 3737
    - dispersal, temperature, Japan 4729
  - provenance, tree breeding, Japan, classification 7344
  - roadside plantations, forest influences, air pollution, Japan 7126
  - root systems, slopes, Japan, stability 4600
  - runoff, streams, Japan, chemistry 1533
  - salt spray, topography, Japan, damage 4475
  - seedlings
    - flowers, tree breeding, inheritance, male sterility 4831
    - soil chemistry, acidification, growth 7048
  - selection forests, crown, stand structure, Japan 4360, 6824

Cryptomeria japonica *cont.*
- shoot cuttings, foliage, morphology 9446
- site preparation
  - slash
    - soil chemistry
      - ions, Japan 7045
      - nitrogen, Japan 4339
- soil chemistry
  - cations, Japan 1094
  - Japan, nitrogen, mineralization 4487
- stand characteristics, geographical distribution, Japan 4766
- stand density
  - aerial photography, Japan 9637
  - increment, Japan 9536
- stand structure
  - Japan, climax communities, spatial distribution 8157
  - thinning, Japan, equations, growth 3479
- stem form, Japan, volume, equations 4193
- stemflow
  - chemistry, carbon, measurement 7125
  - pH, soil chemistry, acidification, Japan 1992
- stems, wind damage, Japan, shakes, distribution 9678
- thinning
  - crown
    - biomass, simulation 4352
    - light, simulation, Japan 1773
  - Japan, roads, economics 9522
  - whole tree logging, forestry machinery, mobile units 4369
- tree breeding
  - gas exchange, plant morphology 7186
  - genetics, Japan 1420
  - Japan, selection criteria, inbreeding depression 9033
- understorey, *Thujopsis dolabrata,* Japan, spatial distribution, stand characteristics 4327
- vegetation, surveys, soil types, Japan 7279
- volume determination, merchantable volume, stem form, equations 1822
- volume tables, diameter 4391
- wood anatomy
  - Japan, growth, wood properties 9793
  - variation, physiology 2028
- wood chemistry, lignin 6450
- wood properties, measurement, techniques 4386
- woodland grasslands, improvement, Japan, cows 4959

Cryptorhynchus lapathi, insect pests, *Populus davidiana,* Korea Republic, resistance, heritability 8326

Cryptostegia grandiflora, vegetation, reclamation, sodic soils, India 712

Crystals
- broadleaves, bark, diagnostic value 6410
- calcium oxalate, Casuarinaceae, epidermis 5382
- *Picea pungens,* foliage 6404

Cuba
- agroforestry, soil suitability, mapping 9288
- *Albizia procera,* shade trees, crops, spacing 1557
- *Cedrela odorata,* breeding programmes 1434
- forest trees, rhizosphere, soil biology, microorganisms 1107
- fungal diseases
  - *Ceratocystiopsis minima, Pinus* 1458
  - *Ceratocystis, Pinus caribaea* 1458
  - *Ceratocystis brunneo-crinita, Pinus* 1458
- *Gliricidia sepium,* cutting frequency, fodder 6949
- insect pests
  - *Dioryctria horneana, Pinus,* oleoresins 5392
  - *Hypsipyla grandella*
    - *Cedrela odorata,* damage 1483
    - *Swietenia macrophylla,* damage 1483
  - *Pinus,* population dynamics 9136

Cuba *cont.*
- insect pests *cont.*
  - *Rhyacionia frustrana, Pinus caribaea,* biological control 1499-1500
- *Khaya,* forest plantations, agroforestry, sheep 1556
- *Leucaena leucocephala*
  - shade trees, crops, spacing 1557
  - variety trials
    - direct sowing, seed germination, growth 6872
    - morphology, growth 6873
- mangroves, roots, biomass 7149
- multipurpose trees, species trials, reclamation, mined land 1540
- *Pinus,* silvicultural systems, hydrology 4937
- *Pinus caribaea*
  - ferrallitic soils, soil properties 1086
  - forest plantations, weed control, herbicides, phytotoxicity 1763
- *Pinus maestrensis*
  - ferrallitic soils, soil properties 1086
  - spacing, stand development, increment 950
- plant parasitic nematodes, *Meloidogyne,* shade trees, crops 1496
- *Swietenia macrophylla,* forest plantations, agroforestry, sheep 1556
- watersheds, management, projects, education 4078

Cunninghamia lanceolata
- China, reviews 2926
- forest influences, soil, nutrients, China 8017
- forest plantations, soil fertility, China 8018
- increment, growth models, China 6984
- plant parasitic nematodes, *Tylenchulus semipenetrans,* soil properties, China 5775
- seed germination, water stress 9426
- taungya, indigenous knowledge, China 7572

Cupressaceae
- chloroplast genetics, taxonomy 500
- flora, Australia 12
- fungal diseases, *Seiridium cardinale,* amenity trees, Germany 9111
- insect pests, *Haematoloma dorsatum,* Italy, ecology 9141

Cupressocyparis leylandii
- Christmas trees, USA 9558
- fungal diseases, *Seiridium unicorne,* pathogenicity 5637

Cupressus
- bark, chemistry, esters 1253
- insect pests
  - *Cinara cupressi,* Malawi, biological control 8350
  - *Phloeosinus,* Austria 9167
- wood chemistry, esters 1253

Cupressus abramsiana, chemotaxonomy, USA, terpenoids 4738

Cupressus arizonica
- chemotaxonomy, USA, terpenoids 4738
- fertigation, plant nutrition, nurseries, hydroponics 10153
- forest plantations, thinning, Italy 945
- roots, chemotaxonomy, mitosis, ascorbic acid 9899

Cupressus bakeri
- cones, genetic variation, taxonomy, USA 2198
- foliage
  - chemistry, sesquiterpenoids 8087
  - genetic variation, taxonomy, USA 2198
- genetic variation, USA, terpenoids 2195

Cupressus benthamii, provenance trials, Tanzania 5058

Cupressus forbsii, chemotaxonomy, USA, terpenoids 4738

Cupressus funebris, foliage, diterpenes 427

Cupressus glabra (*see Cupressus arizonica*)

Cupressus goveniana, chemotaxonomy, USA, terpenoids 4738

Cupressus lindleyi (*see Cupressus lusitanica*)

Cupressus lusitanica
- forest nurseries, herbicides, tolerance 8598
- forest plantations, New Zealand 5992
- fungal diseases, *Seiridium,* pruning, New Zealand 5638
- growth models, forest economics, Ethiopia 6972
- insect pests
  - *Cinara cupressi*
    - Kenya
      - clones, resistance 1479
      - damage 7440
      - ecology 7445
    - Tanzania, clones, resistance 1479
- provenance trials, Tanzania 5058
- tree breeding, wood properties, farm forestry, New Zealand 4830
- wood chemistry, tissue culture, metabolites 418, 5395
- yield tables, Costa Rica 6986

Cupressus macrocarpa
- forest litter, water pollution, reservoirs, Australia 5352
- forest nurseries, herbicides, tolerance 8598
- forest plantations
  - New Zealand 5992
  - thinning, Italy 945
- increment, New Zealand 4403
- precipitation, USA 4083
- roots, chemotaxonomy, mitosis, ascorbic acid 9899
- tree breeding, wood properties, farm forestry, New Zealand 4830

Cupressus pygmaea
- chemotaxonomy, USA, terpenoids 4738
- foliage, phenolic compounds, soil pH, USA 9690

Cupressus sargentii, chemotaxonomy, USA, terpenoids 4738

Cupressus sempervirens
- cones, longevity, seed dispersal, Israel 5421
- embryo culture, culture media 5066
- essential oils, foliage, Japan, seasonal variation 6445
- foliage, buffering capacity, acid rain 3691
- forest plantations, site class assessment, statistical analysis, Argentina 225
- fungal diseases
  - *Diplodia pinea,* Israel, antifungal agents 6629
  - Pakistan, seeds 2257
  - *Phellinus torulosus,* Italy 5626
  - *Seiridium,* mycotoxins 8301
  - *Seiridium cardinale*
    - clones, resistance 6052
    - increment, Italy 9106
    - Italy, resistance, damage 4021
    - Mediterranean Region, resistance 6020
    - tree breeding, resistance, selection criteria 5512
- genetic variation, population genetics, Greece 2190
- micropropagation, culture media 122
- pollen, allergens, France 54
- progeny testing, pollination 5510
- roots, chemotaxonomy, mitosis, ascorbic acid 9899
- shoot cuttings
  - Italy 4290
  - resistance, fungal diseases 6052
- somatic embryogenesis, protoplasts 6050
- tree breeding, selection criteria, resistance, *Seiridium cardinale* 5512
- variety trials, site factors, plant morphology, Mediterranean Region 6020

Cupressus stephensonii, chemotaxonomy, USA, terpenoids 4738

Curatella americana
- cerrado, synecology, phenology, Brazil 8995
- foliage, phenology, photosynthesis, plant water relations, Venezuela 4704

Curculio
- insect pests
  - *Quercus,* Japan, parasitoids 658
  - *Quercus robur,* seeds, Croatia 4891

Curculio elephas, insect pests, *Castanea sativa,* France, ecology 2349
Curculionidae
  insect pests
    Dalbergia sissoo, Nepal 7462
    Pinus sylvestris, Norway, distribution 2350
    Quercus crispula, seeds, Japan, damage 10037
Curtisia dentata, broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223
Curvularia, fungal diseases, *Eucalyptus,* Indonesia, control 2280
Cussonia barteri, population dynamics, savannas, Côte d'Ivoire, simulation 2511
Customary law, forest resources, Indonesia, economic development, shifting cultivation 3344
Cuticle, bark, triterpenoids, *Picea jezoensis,* chemotaxonomy, Japan 8083
Cuttings (*see* Vegetative propagation)
Cyanobacteria, mangroves, epiphytes, nitrogen fixation, Guadeloupe 537
Cyathea spinulosa, foliage, terpenoids 9820
Cycadaceae
  books 744
  embryology, evolution 2940
Cycadopsida
  plant composition, flavones, chemotaxonomy 3048
  surveys, endangered species, conservation 3703
Cycas
  flowers, insects, Australia 3038
  taxonomy, India 5432
Cycas circinalis
  seeds, chemistry, amino acids 8077
  taxonomy, India 5432
Cycas revoluta
  symbiosis, roots 4842
  tissue culture, metabolites, enzymes 8095
Cyclaneusma, fungal diseases, *Pinus radiata,* genetic variation, New Zealand 4818, 4821
Cyclaneusma minus, fungal diseases, *Pinus radiata,* New Zealand 4872
Cycling (*see also* Carbon cycle; Nitrogen cycle)
  Acacia, woody weeds, South Africa 6319
  Acer saccharum
    deciduous forests, fertilizers, Canada 886
    fertilizers, soil chemistry, Canada 888
  acid deposition, soil chemistry, simulation, USA 3666
  Acioa barteri, fallow, forest litter, Nigeria, nutrients 2818
  Albizia julibrissin, agroforestry, USA 10116
  Albizia stipulata, agroforestry, biomass production, India 8432
  Alnus nepalensis
    agroforestry, India 4119
    plant nutrition, India 1947
  Arundinaria falcata, secondary forests, biomass production, India 3254
  bamboos, *Dendrocalamus strictus,* biomass production, India 2701
  broadleaves
    forest litter
      Japan, seasonal variation 7894
      Sweden 2820
  calcium, broadleaves, Belgium, leaching 3624
  cations, *Pinus sylvestris,* watersheds, hydrology, Spain 8377
  clear felling, soil chemistry, streams, USA 2907
  coniferous forests, soil, laboratory tests 327
  conifers, air pollution, ozone, acid deposition 6347
  deciduous forests
    roots, USA 2855
    understorey, soil fertility, USA 3619
  Eucalyptus exserta, forest plantations, China, simulation 1139
  Eucalyptus globulus, forest litter, Portugal 7913
Cycling *cont.*
  Fagus sylvatica, canopy gaps, soil water balance, Germany 7950
  forest ecology, biogeochemistry, conferences 3310
  forest litter, wind damage, Puerto Rico 1067
  forest trees
    acid deposition
      biomass, Japan, sulfur 6311
      Japan, sulfur 6312
    biogeochemistry, USA 2814
    biomass production, India 3864
    fertilizers, France 8779
    roots, dynamics, reviews 406
    vegetation types, India 6541
  forests, soil chemistry, forest litter, Tropics 3634
  Lantana camara, scrub, biomass production, India 3254
  Liquidambar styraciflua, nitrogen fertilizers, foliage, USA 8823
  mountain forests, India 3633
  multipurpose trees, agroforestry, biomass production, India 8432
  nutrient uptake, plant nutrition, conferences 6802
  nutrients
    Populus deltoides, biomass, forest litter, India 1942
    Rhododendron arboreum, precipitation, canopy, India 10085
  old-growth forests, Temperate Zones, biogeochemistry, Chile 5296
  periodicity, tropical forests, reviews 4532
  phosphorus
    decay fungi, *Phanerochaete velutina, Fagus,* laboratory tests 8766
    deciduous forests, forest litter, Basidiomycotina, UK 9713
  Picea, biomass production, biogeochemistry, plant nutrition, Russia 7970
  Picea abies
    acid deposition, Denmark 8001
    air pollution, deposition, Germany 6332
    fertilizers, ammonium sulfate, Sweden 2614
    France 1137
    magnesium fertilizers, Germany 7761
    site preparation, slash, Sweden 3445
  Pinus
    foliage
      fertilizers, USA 2859
      weed control, USA 2859
  Pinus contorta, logs, decomposition, USA 2826
  Pinus radiata
    biomass, Australia 6183
    clear felling, forest litter, Spain 5251
  Pinus sylvestris
    biomass production, Finland 7960
    roots, dynamics, peatlands, Finland 407
    site preparation, slash, Sweden 3445
  Pinus taeda, forest influences, USA 5355
  plant disorders, mountain forests, hydrology, Sabah 3806
  plant nutrition, forest management 7954
  plant succession, sandy soils, Germany 7961
  Populus deltoides, spacing, biomass production, India 1941
  Populus grandidentata, carbon dioxide enrichment, USA 3548
  potassium, deciduous forests, watersheds, USA 319
  Pseudotsuga menziesii, fertilizers, irrigation, Netherlands 7963
  Quercus coccifera, forest fires, France 4612
  Quercus ilicifolia, defoliation, plant nutrition, USA 322
  Quercus rubra, fertilizers, nutrient deficiencies, air pollution, nitrogen, Netherlands 2617
  rain forests, forest litter, Brazil 296
  roots, forest litter, biomass production, estimation 321
  savannas, forest fires, Australia 2003
Cycling *cont.*
  soil biology, soil chemistry, Germany 7049
  soil fertility, bogs 7976
  stand development 7956
  sulfur
    Picea abies, Germany 7965
    Pinus sylvestris, air pollution, UK, methodology 3629
    watersheds, forest influences 1950
  tropical forests
    canopy gaps, ground vegetation, India 4785
    reviews 4537
    roots, wind damage, Puerto Rico 3562
  vegetation types, soil organic matter, soil fertility, sustainability 5269
  wind damage, Caribbean 1072
Cyclophragma yamadai, insect pests, *Quercus acutissima,* Japan, biological control, nuclear polyhedrosis viruses 6650
Cydia araucariae, insect pests, Argentina 2301
Cydista, buds, phenology, plant water relations, Costa Rica 2929
Cydonia oblonga, foliage, trichomes, ultraviolet radiation, damage 7161
Cylindrocladium scoparium
  fungal diseases
    Pinus resinosa, seedlings, biological control 9124
    Pterocarpus santalinus, India, foliage 610
Cymbopetalum penduliflorum, rain forests, Mexico, wood anatomy 1211
Cynipidae, insect pests, *Quercus,* UK 6662
Cyprus, insect pests, *Matsucoccus josephi, Pinus* 2315
Cyrilla racemiflora, forest litter, logs, decomposition, Puerto Rico 2819
Cyrtotrachelus
  insect pests
    bamboos, Thailand 9135
    Thyrsostachys siamensis, thinning, pest resistance, Thailand 1775
Cytisus scoparius
  energy value, seasonal variation, forest fires, fire danger, Spain 9773
  woody weeds, biological control, New Zealand 8647
Cytology
  Broussonetia papyrifera, girdling, enzymes 6401
  conifers, planting stock, quality, methodology 5005
Cytospora, fungal diseases, *Picea pungens,* USA 4866
Cytospora kunzei, fungal diseases, *Picea pungens,* USA 4866
Czech Republic
  air pollution, damage, remote sensing, thematic mapper 6233
  arboreta 2439
  birds, nature conservation, history 6840
  botanical gardens 2439
  coniferous forests, deforestation, hydrology 5831
  deciduous forests, stand structure, spatial distribution, plant competition 3108
  economics, forest management, textbooks 10
  insect pests
    Hylobius abietis, monitoring 7477
    Neodiprion sertifer, Pinus sylvestris, pheromone traps 5763
  landscape, land use, change 8452
  mixed forests
    stand structure, spatial distribution, plant competition 3108
    transpiration, estimation, climate 3324
  mountain forests, soil types, forest management, monographs 45
  Picea abies
    air pollution
      canopy, foliage, distribution 7088
      throughfall, soil chemistry 2863
    foliage, seasonal variation, plant growth regulators, IAA 457
    forest decline, remote sensing, thematic mapper, damage 7840

- **Czech Republic** *cont.*
  - *Picea abies cont.*
    - photosynthesis, foliage, shedding, air pollution 2878
  - urban forestry 10138
    - forest influences 1588
    - history, green belts, management 10141
  - vegetation types, deciduous forests 4776
- **Czechoslovakia**
  - forest decline, air pollution, ground vegetation, synecology, synecology 339
  - fungal diseases, *Ophiostoma roboris, Quercus robur* 7398
  - insect pests, *Operophtera brumata,* heavy metals, parasitoids 2331
  - *Pinus sylvestris,* provenance trials, IUFRO 831
- ***Dacrycarpus dacrydioides***
  - bottomland forests, floods, canopy gaps, New Zealand 3964
  - synecology
    - canopy gaps, natural regeneration, New Zealand 1413
    - epiphytes, climbers, New Zealand 3088
- ***Dacrydium cupressinum***
  - birds
    - forest management
      - clear felling, New Zealand 1507
      - selective felling, New Zealand 1508
  - bottomland forests, floods, canopy gaps, New Zealand 3964
  - synecology, canopy gaps, natural regeneration, New Zealand 1413
- ***Dacrydium xanthandrum,*** roots, suckering, natural regeneration, Sabah 7159
- ***Dacryodes costata,*** seeds, fatty acids, triacylglycerols 2974
- ***Dacryodes edulis,*** seeds, Nigeria, nutritive value 436
- ***Dacryodes excelsa***
  - biomass production, wind damage, simulation, Puerto Rico 1071
  - canopy gaps, snails, Puerto Rico 1474
  - gas exchange, light, Guadeloupe, adaptation 4682
  - rain forests
    - nutrients, Puerto Rico, measurement 7080
    - wind damage, Puerto Rico 3561
  - roots, natural grafting, Puerto Rico 1219
  - soil chemistry, wind damage, simulation, Puerto Rico 1071
  - tropical forests, Puerto Rico, basal area, growth 7825
  - wind damage
    - Guadeloupe, resistance 1063
    - Puerto Rico 1073
- ***Daedaleopsis flavida,*** fungal diseases, broadleaves, tropical forests, India 6627
- ***Daemonorops hystrix***
  - canes and rattans
    - insect pests
      - *Macrochirus praetor*
        - Indonesia
          - control 2379
          - damage 2342
          - light 2342
- ***Daemonorops margaritae,*** canes and rattans, edible species, chemistry 2057
- ***Daemonorops melanochaetes,*** canes and rattans, forest nurseries, fertilizers, Indonesia 1803
- ***Daemonorops pericanthus,*** seedling growth, tillage, *Cassia siamea,* underplanting, Indonesia 6149
- ***Dahlia excelsa,*** flowers, morphology, Mexico 1212
- ***Dahlia tenuicaulis,*** flowers, morphology, Mexico 1212
- ***Dalbergia,*** agroforestry, lac, China 978
- ***Dalbergia cochinchinensis,*** seed germination, stratification, temperature, testing, viability 7728
- ***Dalbergia dolichopetala,*** seeds, plant growth regulators, gibberellins, metabolism 3756
- ***Dalbergia latifolia***
  - shade trees, density, canes and rattans, *Calamus manan,* Indonesia 1802
  - taxonomy, identification, Indonesia 2113
  - tree breeding, India 3140
- ***Dalbergia mimosella,*** taxonomy, identification, Indonesia 2113
- ***Dalbergia oliveri,*** taxonomy, identification, Indonesia 2113
- ***Dalbergia sissoides,*** taxonomy, identification, Indonesia 2113
- ***Dalbergia sissoo***
  - agroforestry, India 10107
  - air pollution, damage, urban areas, India 6328
  - allelopathy, foliage, extracts 3106
  - branching, habit, India 2037
  - cambium, cell division, seasonal variation 4644
  - coppice, growth, India 1737
  - foliage, extracts, *Prosopis cineraria,* seedling growth, allelopathy 2161
  - forest litter, measurement, decomposition, India 3586
  - forest nurseries
    - Nepal, planting stock, production costs 9480
    - planting stock, stumps, production, Pakistan 6074
  - forest plantations
    - forest influences, soil properties, India 1993
    - irrigation, stand establishment, India 8630
    - roots, distribution, India 2952
  - fuel plantations
    - diameter, India, equations 1615
    - height, India, equations 1615
  - fuelwood, India, calorific value 3361
  - fungal diseases
    - *Glomerella cingulata,* culture media 2283
    - *Phyllactinia dalbergiae,* India 2281
  - indicator species, air pollution, traffic, India 5316
  - insect pests, Curculionidae, Nepal 7462
  - irradiation, growing media, seed germination, seedling growth 582
  - micropropagation 8577
  - mites, *Eriophyes,* galls, India 2371
  - parasitic plants, *Santalum album,* increment, India 186
  - progeny testing, seeds, quality, India 9064
  - provenance trials, India 1651
  - reclamation
    - mined land
      - India, economics 3248
      - species trials, India 3246
    - waste land, soil water, infiltration, India 8397
  - root nodules, *Rhizobium,* seed germination, seedling growth 8255
  - seed germination
    - fumigants, phostoxin, phytotoxicity 5781
    - seedling growth, India 840
    - seedlings, survival, India 2573
  - seedlings, water stress, roots, growth 314
  - seeds
    - colour, seed germination, India 847
    - leaching, irradiation, seed germination, seedling growth 2569
  - shelterbelts, crops, India 10107
  - shoot cuttings, India 6060, 9443
  - species trials
    - fuel plantations, Nepal 6865
    - India 1664
    - reclamation
      - fly ash, India 9248
      - mine spoil, India 2404, 4949
      - sodic soils, India 712
  - street trees, air pollution, dust, damage, Pakistan 4550
  - taxonomy, identification, Indonesia 2113
  - tree breeding, India 3140
  - ultisols, fertilizers, seed size, pot experimentation 7758
- ***Dalbergia tucurensis,*** soil chemistry, nitrogen, mineralization, Costa Rica 5247
- **Damping off** (*see* Fungal diseases)
- **Dams,** stream training, Italy, design, construction 10084
- ***Danais***
  - climbers
    - taxonomy
      - Comoros 9892
      - Madagascar 9892
- **Dangerous trees**
  - assessment, wind damage, street trees 10152
  - databases, *Pinus radiata,* USA 5906
  - *Quercus,* hurricanes, USA, assessment 3286
  - street trees, safety devices, Germany 10148
- ***Daniellia oliveri,*** medicinal plants 8689
- ***Daniellia pynaertii,*** pollination, monkeys, Zaire 4737
- ***Daphne odora,*** vegetative propagation, shoot cuttings, roots 2582
- ***Daphniphyllum,*** natural regeneration, protection, forest plantations, India 4811
- ***Dasineura ingeris,*** insect pests, *Salix,* Sweden 7496
- ***Dasineura iteobia,*** insect pests, *Salix,* Sweden 7496
- ***Dasineura marginemtorquens***
  - insect pests
    - *Salix viminalis*
      - biology, behaviour 9133
      - Sweden, *galls* 5772
- ***Dasineura schreiteri,*** insect pests, *Salix,* Sweden 7496
- ***Dasineura terminalis,*** insect pests, *Salix,* Sweden 7496
- ***Dasyprocta punctata,*** rodents, seed predation, *Scheelea zonensis,* Panama 6509
- ***Dasyscypha willkommii*** (*see Trichoscyphella willkommii)*
- **Data analysis,** provenance trials, progeny testing, artificial selection, Poland 2179
- **Data banks,** forest trees, Italy 214
- **Data collection**
  - agroforestry, indigenous knowledge, Rwanda, methodology 10105
  - forest inventories, Canada, equipment, computer techniques 1024
  - measurement, theory 6992
- **Data processing**
  - *Acacia auriculiformis,* provenance trials, statistical analysis, South East Asia 29
  - forest inventories, diameter, growth models, Sweden 9599
  - remote sensing, radar, vegetation types, USA 1041
- **Databases**
  - agroforestry
    - development projects
      - Central America 10109
      - Dominican Republic 10109
  - amenity trees, clay soils, buildings, UK 10146
  - dangerous trees, *Pinus radiata,* USA 5906
  - forests, dynamics, biodiversity, monitoring 7685
  - multipurpose trees, computer software, decision making 4227
  - remote sensing, satellites, land use, classification, New Zealand 8400
  - vegetation types, information services, Russia 6836
- ***Davidia involucrata,*** species trials, exotics, arboreta, New Zealand 2545
- **Dead trees**
  - birds
    - vegetation types
      - America 1515
      - USA, surveys 4902
  - bottomland forests, USA, birds, feeding behaviour 6680
  - decay, simulation, USA 1331
  - ecology, aquatic environment, USA, books 4156
  - *Populus tremula*
    - Finland, insects, endangered species 4027
    - Russia, insects, endangered species 4027

Dead trees *cont.*
- volcanoes, soil air, carbon dioxide, USA 8874-8875

Dead wood
- decomposition, conifers, USA 4497
- estimation, conifers, USA 4381

Debregeasia hypoleuca
- biomass production, India, equations 789
- seeds, storage, seed germination, reclamation, India 79
- shoot cuttings, erosion control, India 95

Decay
- forest trees, Canada, measurement, statistical analysis 4392
- roots, *Picea abies,* defoliation, Switzerland 469

Decay fungi
- conifers
  - forest plantations, Italy, ecology, succession 6606
  - roots, stumps, Sweden 9989
- *Phanerochaete velutina, Fagus,* cycling, phosphorus, laboratory tests 8766
- *Resinicium bicolor,* forest litter, biology 9715

Decision making
- forest management, logging, statistical analysis 1019
- multipurpose trees, computer software, databases 4227

Decline (*see* Forest decline)

Decussocarpus rospigliosii, cloud forests, clear felling, plant succession, Venezuela 5458

Deer
- *Alces alces*
  - *Betula alba,* stand development, Russia 7530
  - browsing, reviews, ecology 7523
  - Canada, telemetry, global positioning systems 9208
  - forest management, multiple use, hunting, Canada 9219
  - *Pinus sylvestris*
    - browse, Sweden 10069
    - browsing, Sweden, simulation 10071
    - browsing damage, Finland 7519
  - site preparation, herbicides, USA 9229
- browsing damage, protection forests, forest economics, Germany 7533
- *Capreolus capreolus*
  - *Abies alba,* natural regeneration, browsing damage, France 1740
  - broadleaves, browsing damage, France 1512
  - forest recreation, Germany 7537
  - Italy, biology, population dynamics 1517
  - salvage felling and logging, Norway 6694
- *Cervus,* broadleaves, browse, New Zealand 9226
- *Cervus dama, Pinus sylvestris,* Poland, damage, assessment 4049
- *Cervus elaphus*
  - *Abies alba,* natural regeneration, browsing damage, France 1740
  - broadleaves, France, ecology, stand characteristics 7538
  - browsing, *Nothofagus solandri,* New Zealand 4051
  - browsing damage, sclerophyllous scrub, Corsica 7525
  - *Pinus sylvestris,* grazing effects, forest ecology, UK 2392
  - USA, forest fires, feeding behaviour 3200
- *Cervus nippon, Fagus crenata,* natural regeneration, Japan, browsing damage 4054
- *Cervus unicolor,* broadleaves, drought, India, damage 2844
- *Chamaecyparis obtusa,* browsing damage, Japan, fences, control 7529
- *Muntiacus reevesi,* UK, habitats, spread 10073
- *Odocoileus hemionus*
  - browse, Canada 1505
  - clear felling, USA, habitats 8366

Deer *cont.*
- *Odocoileus hemionus cont.*
  - forest management
    - hunting, USA 10065
    - logging, Canada 239
  - *Quercus rubra,* plant succession, USA 3093
  - USA, repellents 3199
- *Odocoileus virginianus*
  - *Abies balsamea,* USA, browsing damage 3203
  - browse
    - management, USA 3201
    - plant succession, USA 5827
    - USA 10059
  - forest trees, browse, USA 3196
  - *Pinus strobus,* Christmas trees, USA 4370
  - riparian forests, Canada, habitats 4903
  - USA
    - ecology, management 3213
    - resting places 3202
- *Pinus sylvestris,* natural regeneration, damage, fungal diseases, Finland 10061
- *Rangifer tarandus,* clear felling, Canada, ecology 687
- *Salix,* browsing damage, USA 5826

Deer farming, dehesa grasslands, woodlands, Spain 8355

Defence mechanisms
- conifers, resins, abietic acid, biosynthesis 8114
- *Picea rubens,* injuries, USA, geographical variation 8110

Defoliation
- *Acer saccharum,* photosynthesis, water use efficiency, insect pests 1477
- *Betula pendula,* foliage, phenology, plant nutrition, temperature 4617
- *Betula pubescens,* air pollution, foliage, Finland, TCA 1165
- conifers
  - dendroclimatology, Italy, growth 4989
  - shoots, forest decline, Germany 9865
- forest inventories, damage, drought, forest fires, Spain 7816
- *Fraxinus excelsior,* shoots, phenology, growth 3711
- *Grewia optiva,* foliage, biomass production, increment, India 6147
- insect pests
  - Lepidoptera, conifers, Canada 4047
  - *Malacosoma disstria, Populus,* clones, resistance 3182
  - *Neodiprion sertifer, Pinus resinosa* 7490
  - *Nephopterix syntaractis, Avicennia marina,* Hong Kong 10038
- *Lupinus arboreus,* biomass production, agroforestry, nurse trees, UK 3478
- *Picea abies*
  - air pollution, vehicles, Sweden, aerial photography 1167
  - decay, roots, Switzerland 469
  - nutrient deficiencies, soil chemistry, Germany, phosphorus 1126
  - reviews 469
- *Pinus sylvestris*
  - branches, foliage, increment, Finland 8892
  - shoots, growth, Finland 2959
- *Populus* 'Robusta', wood chemistry, seasonal variation 3780
- *Quercus ilicifolia,* plant nutrition, cycling, USA 322
- *Robinia pseudoacacia,* seedlings, photosynthesis, shading, branches 2076
- seasonal variation
  - *Acacia,* soil salinity, wind damage, Cape Verde 1883
  - *Prosopis,* soil salinity, wind damage, Cape Verde 1883

Deforestation
- Africa South of Sahara 2410
- climate, simulation, Tropics 3255
- coniferous forests, hydrology, Czech Republic 5831
- conifers, nature conservation, Chile 3253

Deforestation *cont.*
- control
  - agroforestry, carbon cycle, climatic change 3259
  - shifting cultivation, Tropics 4102
- deciduous forests, soil organic matter, carbon cycle, Mexico 4529
- degraded forests, rehabilitation, Indonesia 8415
- drought, forest influences, India 7869
- economic policy, Costa Rica 8544
- environmental degradation, community forestry, Nepal 8413
- environmental impact
  - socioeconomics 4953
  - Switzerland 719
- environmental protection, non-governmental organizations, Indonesia 6862
- erosion, China, history 3252
- forest ecology, USA 1550
- forest economics, Cambodia, land use, fishing 7570
- forest management, rural women, sustainability, Sri Lanka 4105
- forest ownership
  - legal rights 5862
  - simulation 4104
- forest policy
  - climatic change, biodiversity 5023
  - Costa Rica 6852
  - theory, simulation 8412
- forest resources
  - land use, forest management, Chile 5989
  - non-wood forest products, Zimbabwe 8417
  - refugees, Malawi 6720
  - tropical forests, timber trade 5860
- forest trees, utilization, Namibia 8531
- forestry
  - climatic change 5224
  - forest management, Thailand, women, attitudes 8528
- forestry development, Developing Countries 4101
- forests
  - conservation
    - India 4106
    - Tropics 4106
  - land use, history, Pakistan 5859
- fuelwood
  - forest nurseries, Malawi 3423
  - resources, South Africa 8556
- history
  - Pakistan 6848
  - shifting cultivation, ecology, Sierra Leone 3265
  - sociological analysis, Guinea 8536
- hydrology 8418
- Indonesia 722
- insects, *Euglossa,* Brazil, ecology 619
- land clearance, soil properties, Bolivia 8006
- land use
  - cattle farming, Central America 8416
  - erosion, Tanzania 3249
  - fuelwood, Ghana 3362
  - India 721
  - plant succession, soil properties, Costa Rica 2154
  - sustainability
    - Brazil 720
    - water resources, South East Asia 707
  - upland areas, history, Philippines 8402
- logging, tropical forests, forest management, sustainability 9609
- maps 7629
- nature conservation
  - Developing Countries, external debt 7571
  - Singapore 3873
- nitrogen cycle, greenhouse effect, Costa Rica, estimation 2409
- palaeoclimatology, Africa 7569
- *Phylica nitida,* nature conservation, grazing, control, Indian Ocean Islands 9297

Deforestation *cont.*
- *Pinus kesiya,* stand structure, Thailand 10094
- *Pinus roxburghii,* forests, synecology, ground vegetation 535
- pollen analysis, vegetation, history, UK 4763
- *Quercus,* mountain forests, agroforestry, Costa Rica 7575
- *Quercus leucotrichophora,* forests, synecology, ground vegetation 535
- rain forests
  - aerial photography, Zimbabwe 7002
  - Amazonia 532
  - biomass, Brazil 3736
  - environment, South East Asia 5864
  - forest economics, Tropics 8521
  - forest policy, Western Samoa 6718
  - leaf area index, Brazil 3736
  - remote sensing
    - Argentina 5861
    - Australia 9261
  - soil acidity, India 5865
  - sustainability, biodiversity, Brazil 3352
- reclamation
  - afforestation, plant succession, Amazonia 7557
  - agroforestry, Vietnam 6709
- remote sensing
  - Costa Rica 718
  - land use, Thailand 7852
  - Landsat, thematic mapper, Peninsular Malaysia 8738
- savanna woodlands, land use planning, development projects, Cameroon 4952
- savannas
  - South America 5000
  - synecology, Zimbabwe 6549
- shifting cultivation, Indonesia 5868
- social forestry, Asia, theory 10120
- socioeconomics, Developing Countries 4103
- soil degradation, hill land, shifting cultivation, land use, India 10087
- soil organic matter, soil chemistry, Costa Rica 290
- soil pore system, Amazonia 1899
- suburban areas, Japan 9263
- surveys, forest resources, remote sensing, India 1551
- sustainability, Africa, policy 9262
- *Swietenia macrophylla,* logging, forest economics, Amazonia 7568
- timber trade, trade sanctions, forest policy, simulation, Tropics 4956
- tropical forests
  - biodiversity 6719
    - nature conservation, China 9006
  - climatic change, simulation 3557
  - forest economics, books 2449
  - forest management
    - sustainability
      - Asia, conferences 6801
      - Australia, conferences 6801
  - forest policy
    - economics 5863
    - forest management, development projects 8514, 9370
  - history, Brazil, books 6779
  - hunting, nature conservation, Peru 5812
  - natural regeneration
    - land use 1415
    - remote sensing, carbon dioxide 1047
  - nature conservation 5891
  - reclamation
    - Asia, conferences 2479
    - Oceania, conferences 2479
- urban hinterland, Developing Countries, effects, analysis 9264
- vegetation types, USA 6721
- water quality, streams, soil water, Brazil, simulation 8419
- watersheds, runoff, Sri Lanka 2399
- wildlife, simulation, Brazil 4955
- woodlands, synecology, Zimbabwe 6549

Degraded forests
- air pollution, Russia 1157
- broadleaves, reclamation, Albania 6707
- coniferous forests, exotics, invasion, USA 3870
- energy resources, planning, fuelwood, India 57
- forest policy, forestry development, forest products industries, India 2521
- forest trees, forest decline, urban areas, Korea Republic 9312
- history, Germany 808
- multipurpose trees, agroforestry, development projects, reclamation, Thailand 3242
- reclamation
  - South East Asia, techniques, reviews 3238
  - techniques, India 6706
- rehabilitation
  - Indonesia 1530
  - tropical forests, Tropics, conferences 18
- savanna woodlands, grazing, Tanzania 3905
- *Shorea robusta,* stand structure, synecology, India 213
- soil properties, afforestation, Costa Rica 8390
- tropical forests
  - reclamation
    - Asia, conferences 2479, 3232, 3245
    - Oceania, conferences 2479, 3232, 3245
- vegetation types, synecology, Bolivia 9932

Degraded land
- afforestation, mixtures, reclamation, Australia 3233
- multipurpose trees, forest plantations, reclamation, Philippines 8624
- reclamation, techniques, India 6706

Dehaasia firma, geographical distribution, India 505

Delonix, root nodules, surveys 2235

Delonix regia
- air pollution
  - damage, urban areas, India 6328
  - India, growth, plant physiology 2869
- forest nurseries, irrigation, waste water, Niger 9473
- seed germination, seed treatment 85
- species trials, reclamation, fly ash, India 9248

Demonax transilis, insect pests, conifers, Japan, attractants 4040

Demonstration forests, bamboos, plantations, Philippines 9563

Dendrocalamus, vegetative propagation, indigenous knowledge, Nepal 6883

Dendrocalamus asper, bamboos, tissue culture, bud culture, micropropagation 6047

Dendrocalamus giganteus
- bamboos
  - somatic embryogenesis 1702
  - stems, anatomy, morphology, development 6418
  - tissue culture, bud culture, micropropagation 6047

Dendrocalamus hamiltonii, bamboos, natural regeneration, shifting cultivation, India 8426

Dendrocalamus membranaceus
- bamboos
  - tissue culture
    - bud culture, micropropagation 6047
    - cell culture, protoplasts 8587

Dendrocalamus strictus
- bamboos
  - biomass production, cycling, India 2701
  - seed germination, plant growth regulators 3380
  - somatic embryogenesis 1702
  - tissue culture, bud culture, micropropagation 6047

Dendrochronology
- *Abies,* increment, basal area, Germany, statistical analysis 793
- *Abies alba*
  - forest decline
    - France, air pollution, climate 2091
    - Italy 8942
    - Switzerland, air pollution, climate 2091
- *Acer saccharum*
  - Canada, techniques, mass spectrometry 5006
  - forest decline, Canada, simulation 1591
- broadleaves, synecology, increment, USA 5914
- *Carya illinoinensis,* growth rings 9313
- cellulose, extraction, carbon, isotopes, techniques 8462
- *Chamaecyparis obtusa,* forest ecology, Japan 6761
- conifers
  - North America 3292
  - treelines, dieback, Switzerland 6762
- deciduous forests, climate, soil, Canada 4142
- ecology, history, *Pinus,* Spain 2441
- *Eucalyptus marginata,* forest fires, Australia 8463
- *Fagus sylvatica*
  - autecology, Spain 1592
  - forest decline, France, growth rings, increment 4991
- forest fires, frequency, *Quercus stellata,* USA 8029
- forest litter, logs, Canada, dispersal 5913
- forest trees
  - air pollution, increment, Poland 7612
  - increment, France 3290
  - Japan, history 4139
  - roots, Germany 6760
- increment, basal area, growth rings, equations 7665
- insect pests
  - *Choristoneura occidentalis,* conifers, USA 6765
  - *Pristiphora erichsonii*
    - *Larix laricina*
      - Canada 5764
        - introduced species 1486
- *Juniperus virginiana,* heartwood, acid deposition, USA 4141
- *Larix lyallii,* treelines, Canada 10162
- *Larix sibirica,* Russia 4992
- mathematics, statistical analysis 6821
- old and fossil wood, Canada 8464
- *Picea abies,* palaeoecology, vegetation, history, Sweden 7613
- *Picea glauca,* increment, wind damage, Canada 3484
- *Picea pungens,* soil pollution, manganese, Canada 3680
- *Picea rubens,* forest decline, statistical analysis, USA 5915
- *Pinus*
  - autecology, Spain 1592
  - Spain 6766
- *Pinus cembra,* carbon dioxide enrichment, Austria 6764
- *Pinus sylvestris*
  - bogs, British Isles 9315
  - Sweden 5916
- *Pseudotsuga menziesii,* natural regeneration, volcanoes, USA 363
- *Quercus*
  - climate, carbon dioxide enrichment, France, simulation 4466
  - forest decline, USA 9863
  - seeds, periodicity, Germany 782
- *Quercus coccinea,* fertilizers, lime, wood chemistry, USA 1590
- *Quercus robur*
  - air pollution, Sweden 6759
  - Italy, drought, adaptation 4508
- *Quercus stellata,* growth rings 9313
- subalpine forests, USA 3291
- virgin forests, plant succession, USA 6562

Dendroclimatology
- conifers
  - boreal forests, Arctic Regions 4140
  - defoliation, Italy, growth 4989
  - increment, climate, USA 4990

Dendroclimatology *cont.*
- conifers *cont.*
  - subalpine forests, USA 4470
- *Fagus sylvatica*
  - increment, Slovakia 10158
  - Italy 2442
- forest trees, UK 7615
- *larix gmelinii,* Russia 3289
- *Pinus balfouriana,* USA 8465
- *Pinus massoniana,* China 7614
- *Pinus rigida,* stand characteristics, increment, USA 6763
- *Pinus sylvestris,* water stress, Germany 10159
- *Pseudotsuga menziesii,* increment, USA 10161
- *Quercus,* Mediterranean Region 3288
- *Tectona grandis,* Indonesia 10160
- *Thuja occidentalis,* Canada 2440

Dendrocopos leucotos, birds, mixed forests, national parks, Poland 4064

Dendroctonus, insect pests, *Pinus jeffreyi,* USA, remote sensing 3187

Dendroctonus brevicomis
- insect pests
  - conifers, USA 7475
  - *Pinus ponderosa,* USA, attractants 656

Dendroctonus frontalis
- insect pests
  - forest management, USA 10056
  - *Pinus,* forest plantations, Venezuela 6645
  - *Pinus* (Southern)
    - USA
      - distribution 4889
      - spread 653
  - *Pinus taeda*
    - attractants 655
    - insecticides, toxicity 5784
    - USA
      - control 8352
      - plant water relations 8338
  - symbionts, fungi 8341

Dendroctonus jeffreyi, insect pests, *Pinus,* symbionts, interactions 5758

Dendroctonus micans
- insect pests
  - legislation, UK, surveys 3184
  - *Picea abies*
    - biological control, France, *Rhizophagus grandis* 9185
    - France 652
      - biology, population dynamics 4890

Dendroctonus ponderosae
- insect pests
  - *Pinus,* symbionts, interactions 5758
  - *Pinus contorta*
    - Canada
      - control 7479
      - fungal diseases, *Ophiostoma* 6637
    - USA, growth effects 7205

Dendroctonus pseudotsugae
- insect pests
  - *Pseudotsuga menziesii*
    - USA
      - disease vectors 5661
      - pheromone traps 5735
  - USA, trapping 8340

Dendroctonus punctatus, insect pests, *Picea,* North America, biology 8343

Dendroctonus rufipennis
- insect pests
  - forest management, decision making, North America, risk 4892
  - *Picea lutzii*
    - USA
      - resistance 1491
      - simulation 1491
  - subalpine forests
    - dendrochronology
      - USA
        - avalanches 3291
        - forest fires 3291

Dendroica kirtlandii, birds, *Pinus banksiana,* forest fires, USA 3218

Dendrolimus, insect pests, *Pinus,* China, research, pest management 2335

Dendrolimus punctatus, insect pests, *Pinus massoniana,* China, control 670

Dendrolimus superans, insect pests, *Larix,* Russia, biology 644

Dendrology (*see* Silvicultural characters)

Dendrometers (*see also* Angle count; Mensuration; Relascopes)
- increment, diameter, history 4387

Dendropanax morbifera, provenance, genetic variation, Korea Republic, foliage, morphology 8238

Dendrophthoe, mistletoes, seed dispersal, forests, Colombia 1469

Dendrophthoe falcata
- mistletoes
  - *Albizia amara,* India 2295
  - forest trees, India 6642
  - forests, India, surveys 2295
  - host plants, reviews 618

Denitrification, *Pinus sylvestris,* fertilizers, clear felling, soil chemistry, Sweden 1095

Denmark
- *Abies,* provenance trials, Christmas trees 6945
- *Abies nordmanniana,* soil, herbicides, residues 8797
- arboreta, guide books 4988
- *Betula pendula,* thinning, stems, quality, wood properties 9519
- conifers, air pollution, deposition, throughfall, precipitation 2866
- development aid
  - agroforestry 4232
  - forestry 4232
- *Fagus sylvatica*
  - natural regeneration
    - seedbeds, site factors, light 6920
    - site preparation, seed banks 7773
  - thinning 6936
- fertilizers, sewage sludge, legislation 8593
- forest management
  - forest recreation, landscape 1583
  - planning, decision making, forest economics, simulation 9623
- forest treees, salt spray, soil toxicity 8000
- forest trees
  - forest decline, soil water, chemistry, salt injury 1295
  - forest litter, nutrients, soil properties 7962
  - plant genetic resources, conservation 8187
  - soil formation, weathering 8016
  - soil types, soil properties 1085
- fungal diseases, *Heterobasidion annosum, Picea abies,* control 10005
- herbicides, phenoxy herbicides, water pollution, regulations 7789
- *Picea abies*
  - acid deposition, cycling 8001
  - afforestation, agricultural land, soil morphology, forest influences 5351
  - air pollution
    - deposition, estimation 330
    - soil chemistry, ammonium nitrate 5244
  - forest litter, decomposition, nutrients, soil biology 5256
  - increment, plant nutrition, plant water relations 7819
  - irrigation, increment 6930
  - NPK fertilizers
    - increment 7755
    - irrigation, increment 911
  - plant nutrition, plant water relations, methodology 7650
  - soil chemistry, nitrogen 7888
  - soil organic matter, decomposition, soil water, fertilizers 3581
  - stem form, taper, volume, equations 991
  - wood defects, spiral grain 3683
- *Picea sitchensis,* genetic variation, clonal variation, wood density 567
- *Pinus contorta,* NPK fertilizers, irrigation, increment 911
- *Salix,* geographical distribution 2136

Denmark *cont.*
- shelterbelts, history, silviculture 5847
- woody plants, plant genetic resources, conservation 8187

Deporaus glastinus, insect pests, *Quercus wislizenii,* USA 5745

Dercetina, insect pests, *Acacia mangium,* Philippines 3185

Descolea maculata, mycorrhizas, *Eucalyptus globulus,* Spain 8277

Desertification
- afforestation, Arid Regions, Turkmenistan 2405
- mountain forests, matorral, synecology, Morocco 3939

Deserts (*see* Arid Regions)
- vegetation types, synecology, soil properties, Saudi Arabia 8162

Design, forestry machinery, movement, walking 6944

Desmanthus virgatus, agroforestry, erosion control, Philippines 5873

Desmodium ovalifolium, improved fallow, plant colonization, biomass production, Peru 3266

Desmodium tiliaefolium, biomass production, India, equations 789

Detarium microcarpum, natural regeneration, forest management, development projects, Burkina Faso 8538

Deuteromycotina, fungal diseases, *Abies sibirica,* disease vectors, *Monochamus urussovii* 10046

Developing Countries
- agroforestry
  - development, policy, land use 10096
  - history, socioeconomics 5886
- America, agroforestry, livestock farming, conferences 4181
- deforestation
  - nature conservation, external debt 7571
  - socioeconomics 4103
  - urban hinterland, effects, analysis 9264
- environmental protection, management 4125
- forest management
  - community forestry 6741
  - forest economics, simulation 3532
- forest resources
  - carbon cycle, valuation 3686
  - forest management, rural economy, cooperatives 4463
- forestry development
  - deforestation 4101
  - indigenous knowledge, books 5925
- fuel plantations, agroforestry 3363
- insect pests, forest trees, biological control 5805
- nature conservation, forests, valuation 5967
- tree breeding, biotechnology, reviews 5474
- tropical forests, nature conservation, forest management, sustainability 5857-5858
- Tropics, agroforestry, livestock farming, conferences 4181
- urban forestry, development projects 10147

Development (*see* Forest policy; Forestry development)
- forestry
  - environment
    - India 5984
    - South East Asia 5984

Development aid
- agroforestry, Denmark 4232
- forestry, Denmark 4232
- forestry development, planning, human resources, Indonesia 5983

Development projects
- afforestation
  - agroforestry, Niger 1546
  - Philippines 5980
- agroforestry
  - databases
    - Central America 10109
    - Dominican Republic 10109
  - economics, America 10098

- **Development projects** *cont.*
  - agroforestry *cont.*
    - Ecuador 4114
    - erosion control, watershed management, Haiti 7581
    - extension, India 4108
    - profiles
      - South Asia 3263
      - South East Asia 3263
    - Sahel, extension 10113
  - community forestry
    - extension, Tanzania 1571
    - forest management, Tanzania 1570
    - Latin America, management, sustainability 2424
    - Nepal, woman's status 3276
    - non-governmental organizations, Asia, conferences 774
    - sustainability, Thailand 5889
    - Tanzania 5890
  - degraded forests, reclamation, India 9243
  - *Detarium microcarpum,* natural regeneration, forest management, Burkina Faso 8538
  - economics
    - forest management, community forestry, Peru 8545
    - sustainability, agroforestry, Burkina Faso 1555
  - environmental protection, logging, Philippines, planning, economics 46
  - *Eucalyptus*
    - forest plantations, Rwanda 8535
    - social forestry, choice of species, India 6737
  - farm forestry, economics, America 10098
  - forest economics, cost benefit analysis, discount rates, estimation, India 5211
  - forest management
    - community forestry, Nepal 8729
    - socioeconomics, Burkina Faso 8538
    - women, India 1631
  - forest policy, forest management, Africa South of Sahara 9395
  - forestry
    - international cooperation, Thailand, reports 760
    - Lao, afforestation 5032
  - forestry development
    - international cooperation, Vietnam 1628
    - planning, management, India 9393
  - forests, nature conservation, Kenya 5896
  - fuel plantations, irrigated stands, environmental protection, research, Kenya 6001
  - irrigation, afforestation, Kenya 5981
  - multipurpose trees
    - agroforestry
      - choice of species, Cameroon 6734
      - reclamation, degraded forests, Thailand 3242
    - in vitro culture, Djibouti 9444
  - nature conservation, Tropics 9299
  - reclamation
    - common lands, afforestation, India 7559
    - Mauritania 8535
    - saline soils, farm forestry, Australia 7566
  - savanna woodlands
    - deforestation, land use planning, Cameroon 4952
    - forest management, Guinea 9604
  - social forestry
    - erosion control, Nepal, economics 728
    - India 4120, 8437
      - books 730
    - participation
      - India 4122
      - poverty, Indonesia 7585
  - taungya, Indonesia 1553
  - tropical forests
    - forest management
      - Guinea 9604
      - Honduras 9607
    - forest policy, forest management, deforestation 8514, 9370
- **Development projects** *cont.*
  - urban forestry
    - Developing Countries 10147
    - UK 8454
  - watershed management, fodder, production, India 2396
  - watersheds, erosion control, water conservation, India 2394
- ***Dialium,*** rain forests, improvement planting, economics, Indonesia 4109
- ***Dialium guianense,*** rain forests, Mexico, wood anatomy 1211
- ***Dialium guineense***
  - browse plants, insect pests, Nigeria 8325
  - species trials
    - agroforestry
      - acid soils, Cameroon 2542
      - soil properties, soil types, Nigeria 6868
- ***Dialium pachyphyllum,*** foliage, photosynthesis, plant water relations, Cameroon 313
- **Diameter**
  - *Abies mariesii,* cones, production, Japan 4736
  - *Abies pindrow,* cones, seeds, India 3388
  - broadleaved evergreen forests, crown, stem form, South Africa 224
  - broadleaves
    - equipment, lasers, measurement 4448
    - height, France, equations 4405
  - *Chamaecyparis obtusa,* measurement, photography 9572
  - conifers
    - light, Italy, growth effects 6362
    - remote sensing, Norway 9629
  - distribution, stand structure, simulation 9580
  - forest trees
    - forest plantations, increment, growth models, plant competition 9598
    - height, simulation, statistical analysis 1617
    - Italy, variation 2685
    - stems, equations 1830
  - increment
    - *Colophospermum mopane,* Zimbabwe, site factors, growth effects 7121
    - *Combretum apiculatum,* Zimbabwe, site factors, growth effects 7121
  - *Larix decidua,* pruning, knots, wood properties, Poland 1983
  - measurement, equipment 7649
  - multipurpose trees, fuel plantations, India, equations 1615
  - *Picea abies*
    - provenance trials, increment, drought, Poland 830
    - soil water potential, Germany 9687
  - *Picea smithiana,* cones, seeds, India 3388
  - *Pinus contorta,* bark, thickness, variation, Sweden 990
  - *Pinus sylvestris*
    - form factors, height, Poland 994
    - pruning, knots, wood properties, Poland 1983
  - *Pinus thunbergii,* increment, Japan 6973
  - *Tectona grandis,* fruits, seed germination, India 846
- ***Dicellostyles zizyphifolia,*** taxonomy, Thailand 8973
- **Dichapetalaceae,** taxonomy, new species 8962
- ***Dichapetalum costaricense,*** taxonomy, Costa Rica, new species 8962
- ***Dichapetalum grayumii,*** taxonomy, Costa Rica, new species 8962
- ***Dichapetalum hammelii,*** taxonomy, Costa Rica, new species 8962
- ***Dichrostachys cinerea,*** seed germination 86
- ***Dicorynia guianensis***
  - plant water relations, gas exchange, French Guiana 4506
  - silvicultural characters, stand development, French Guiana 3706
- **Dicotyledons,** wood anatomy, climate, North America 268
- ***Dicruvasates tamaricis,*** mites, *Tamarix nilotica,* Egypt, galls 9177
- **Dictionaries**
  - English 3304
  - French 3304
  - German 3304
  - Russian 3304
  - Slovak 3304
  - Slovakian, English 7636
- ***Dicymbe altsonii,*** photosynthesis, soil fertility, Guyana 7193
- ***Didelphis marsupialis,*** opossums, seed dispersal, *Cecropia obtusifolia,* Mexico 6506
- ***Didia,*** insect pests, *Bauhinia variegata,* Pakistan, seeds 5679
- ***Didierea madagascariensis,*** Arid Regions, stand structure, natural regeneration, Madagascar 8998
- ***Didymopanax,*** wood anatomy 8068
- ***Didymopanax morototoni,*** wood anatomy, wood properties 6428
- ***Didymopanax vinosum,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- **Dieback** (*see* Fungal diseases)
  - conifers, treelines, dendrochronology, Switzerland 6762
  - *Quercus palustris,* USA, foliage, chemical composition 3020
- **Dielectric properties,** forest trees, plant water relations 785
- **Differentiation,** *Cryptomeria japonica,* cell walls, polysaccharides 7173
- ***Dillenia excelsa,*** wood anatomy 414
- ***Dillenia suffruticosa,*** photosynthesis, Singapore 6467
- ***Dillwynia glaberrima,*** sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954
- ***Dineura virididorsata,*** insect pests, *Betula tortuosa,* Finland, biology 2361
- ***Dinizia excelsa***
  - plant water relations, water stress, drought resistance 2570
  - seed treatment, temperature, seed germination 2570
- ***Diorhabda lusca,*** insect pests, *Celtis australis,* India, damage 1488
- ***Dioryctria abietella,*** insect pests, conifers, India, biology 5730
- ***Dioryctria albovittella,*** insect pests, *Pinus edulis,* soil fertility, mycorrhizas, interactions 4014
- ***Dioryctria horneana,*** insect pests, *Pinus,* Cuba, oleoresins 5392
- ***Dioryctria sylvestrella***
  - insect pests
    - *Pinus pinaster*
      - France, damage 4882
      - pruning, France, population dynamics 2337
- ***Diospyros,*** wood anatomy, colour, fungi 4628
- ***Diospyros celebica***
  - *Leucaena leucocephala*
    - mixtures
      - Indonesia
        - growth 1788
        - spacing 1788
  - wood anatomy, colour, fungi 4628
- ***Diospyros lycioides,*** vegetation types, forests, synecology, South Africa 5451
- ***Diospyros melanoxylon,*** degraded forests, stand structure, synecology, India 213
- ***Diospyros texana,*** precipitation, canopy, Mexico, simulation 2398
- ***Diospyros xishuangbannaensis,*** new species, China 9905
- ***Diplodia,*** fungal diseases, *Pinus radiata,* genetic variation, New Zealand 4818
- ***Diplodia pinea***
  - fungal diseases
    - conifers, Netherlands 1453
    - *Cupressus sempervirens,* Israel, antifungal agents 6629
    - *Pinus* 10012
    - *Pinus radiata,* South Africa, hail damage, insect pests 7038
    - *Pinus sylvestris,* resistance, screening 8294
- ***Diplodia taxi,*** fungal diseases, *Taxus baccata,* New Zealand 5650

Diploglottis diphyllostegia, rain forests, seeds, survival, predation, Australia 4050
Diplorhynchus condylocarpon, mistletoes, *Tapinanthus vittatus,* photosynthesis, Zimbabwe 4026
Diprion pini
  insect pests
    Pinus
      biology, plant composition 5765
      Germany, population dynamics 5767
    Pinus sylvestris
      Finland, foliage, monoterpenes 2367
      France
        foliage, taxifolin 4667
        resistance, biology 627
      Poland, chemical control 7499
Diprion simile, insect pests, *Pinus sylvestris,* Poland, chemical control 7499
Dipterocarpaceae
  forests, selective felling, fruiting, Peninsular Malaysia 8127
  mycorrhizas, Indonesia, books 755
  rain forests
    canopy
      precipitation
        erosion
          Sabah 8012
          simulation 8012
    species diversity, forest litter, measurement, Sabah 2823
  savanna woodlands, India 1385
  selective felling, stand structure, Indonesia, logging effects 1738
  shelterwood system, natural regeneration, sustainability, Sri Lanka 921
  shoot cuttings, rooting 9453
  tropical forests, biomass, Peninsular Malaysia, estimation 8706
  underplanting, Philippines, forest plantations 8624
  vegetative propagation, Malaysia 2602
Dipterocarpus costatus, seeds, morphology 2021
Dipterocarpus grandiflorus, seeds, morphology 2021
Dipterocarpus kunstleri, plant nutrition, plant succession, Singapore 4543
Dipterocarpus macrocarpus, seeds, morphology 2021
Dipterocarpus turbinatus, forest plantations, volume tables, volume determination, equations, Bangladesh 6172
Dipteryx panamensis
  increment, diameter, Costa Rica, variation, climate 1841
  soil chemistry, nitrogen, mineralization, Costa Rica 5247
  species trials, Costa Rica 4262
Direct sowing
  Alphitonia petriei, reclamation, Australia 8395
  conifers, soil compaction, Canada 2634
  establishment
    Eucalyptus
      forest ecology, Australia, reviews 2636
      plant physiology, Australia, reviews 2636
  Leucaena leucocephala, variety trials, seed germination, Cuba, growth 6872
  Picea abies, artificial regeneration, tree guards, Italy 6114
  Picea mariana
    seedbeds
      Canada 4332
      site factors, Canada 4330
  Pinus banksiana, Canada, insect pests, damage 2359
  Pinus echinata, site preparation, burning, USA 4340
  Pinus sylvestris, seedling emergence, soil water, site preparation, Sweden 6111
  Quercus, thinning, Poland 6107
  Quercus petraea, underplanting, Germany 9498
  seedbeds, *Picea mariana,* Canada 6925
Dischidia major, kerangas, *Philidris,* Malaysia, mutualism 9134
Discoloration
  Fagus sylvatica, wood anatomy, abnormal development, injuries 1214
  forest trees, heartwood, injuries, wood chemistry, trace elements 8092
Discosporium populeum, fungal diseases, *Populus,* Portugal, control 7411
Discula
  fungal diseases
    Cornus florida
      acid deposition, foliage, morphology 2279
      histology 2278
Discula campestris
  fungal diseases
    Acer saccharum
      USA 5658
        control 2254
Discula destructiva
  fungal diseases
    Cornus
      ornamental woody plants, USA, resistance 8311
      reviews 7406
    Cornus florida
      acid deposition, foliage, morphology 2279
      irrigation, USA 4868
      USA, statistical analysis 9351
Discula platani, *Platanus occidentalis,* foliage, infection 5651
Discula quercina, fungal diseases, *Quercus garryana,* USA, infection 5656
Diseases
  Casuarina, books 2448
  forest trees, Canada, books 7633
  plant disorders, forest trees, books 8467
  Platanus acerifolia, Poland 5618
  Quercus, forest decline, Europe, reviews 4720
Diseases, occupational (*see* Health)
Disholcaspis quercusmamma, insect pests, *Quercus macrocarpa,* street trees, USA 7491
Dispersal, *Nothofagus menziesii,* genetic variation, gene flow, New Zealand 2212
Disturbance, old-growth forests, landscape, plant succession, USA 6568
Distylium lepidotum, plant water relations, drought resistance, Japan 311
Distylium racemosum
  canopy gaps, natural regeneration, Japan, botanical composition 9021
  stems, growth models 1820
Ditches, maintenance, forest plantations, damage, forestry machinery, Finland 3448
Djibouti
  flora, books 1598-1600
  multipurpose trees, in vitro culture, development projects 9444
DNA fingerprinting, *Salix,* molecular genetics 5523
Documentation (*see* Information services)
Dodonaea viscosa
  plant water relations, drought resistance, Japan 311
  seeds, storage, seed germination, reclamation, India 79
Dolichandrone atrovirens
  energy value, seasonal variation, India 2541
  foliage
    plant water relations, biomass production, India 8821
    sugars, photosynthesis 6485
Dominican Republic
  agroforestry, development projects, databases 10109
  multipurpose trees, forest nurseries, growing media 6088
Donacia antiqua, insect pests, *Salix,* foliage, plant physiology 6492
Dormancy
  Acer saccharum, seed treatment, protein synthesis 9437
  Betula pubescens, coppice, buds, plant physiology, seasonal variation 1209
Dormancy *cont.*
  broadleaves, buds, frost resistance, Canada 4477
  Cercis canadensis, seed anatomy 6396
  Picea abies, buds, variation 8046
  Picea sitchensis, grafting, treatment 2599
  Pinus sylvestris, stems, bending, stresses 2937
  Platanus acerifolia, buds, composition, carbohydrates 3761
Dormancy breaking, *Picea abies,* seedlings, buds, temperature 1262
Doryphora sassafras, sap flow, Australia, measurement 6300
Dothiorella, fungal diseases, *Metrosideros excelsa,* New Zealand 4075
Dothiorella gregaria, fungal diseases, *Populus,* pruning, plant growth regulators, control 9086
Dothistroma pini (*see Mycosphaerella pini*)
Dracophyllum filifolium, frost resistance, plant succession, New Zealand 281
Drainage
  Castanea sativa, stand structure, basal area, soil properties, Spain 9574
  forestry, hydrology, clear felling, flooding, Sweden 4932
  peatlands, soil air, methane, Canada 9510
  Pinus sylvestris
    afforestation, peatlands, climate, Sweden 6112
    growth models, Finland 5182
    peatlands, soil chemistry, Finland 3571, 9509
    site class assessment, Russia 231
    thinning, forest economics, simulation 9521
  simulation, logging, smallwood 1541
  wetlands, soil air, Finland 7783
Drainage systems, maintenance, economics, Russia 8631
Draught animals, forestry, UK 5121
Drepanopeziza punctiformis, fungal diseases, *Populus,* Portugal, control 7411
Drepanosiphum platanoidis, insect pests, *Acer pseudoplatanus,* population genetics 5696
Dreyfusia nordmannianae
  insect pests
    Abies alba, Europe, biology 634
    Picea orientalis, Europe, biology 634
Dreyfusia piceae
  insect pests
    Abies, Canada, predators 5695
    Abies fraseri
      genetic variation, USA 5686
      water stress 5687
Drimys granadensis, tropical forests, seed banks, natural regeneration, Colombia 1314
Drimys winteri, rain forests, seed size, recruitment, Chile 7258
Drought
  Alnus rubra, seedlings, carbon dioxide enrichment 7190
  broadleaves
    carbon dioxide enrichment, plant physiology, USA 5406
    forest litter, decomposition, Panama 1916
    India, mortality 2844
    plant physiology, USA, plant ecological groups 8813
  conifers
    foliage, plant anatomy 6296
    plant growth regulators 4518
  Corylus colurna, ornamental woody plants, transplanting, root hydraulic conductivity 6755
  deciduous forests, synecology, increment, USA 3593
  deer, *Cervus unicolor,* broadleaves, India, damage 2844
  Eucalyptus, forest plantations, mortality, increment, South Africa 7873
  Fagus sylvatica, natural regeneration, mortality, advance growth, Spain 927
  forest influences, deforestation, India 7869

- **Drought** *cont.*
  - forest inventories, damage, defoliation, forest fires, Spain 7816
  - forest trees
    - air pollution, ozone, plant physiology 5325
    - gas exchange, leaf water potential, USA 4709
  - fungal diseases, *Botrytis cinerea, Picea mariana,* disease resistance, control 1450
  - mangrove forests
    - Gambia, effects 8760
    - Senegal, effects 8760
  - *Picea abies*
    - plant water relations, transpiration, photosynthesis, France 5279
    - provenance trials, diameter, increment, Poland 830
    - root systems, fertilizers, Sweden 8047
    - soil, minerals, wood anatomy, Germany 2897
  - *Pseudotsuga macrocarpa,* ozone, increment, USA 7107
  - *Pseudotsuga menziesii,* lammas growth, genetic variation, adaptation 4654
  - *Quercus,* forest decline, soil water, Spain 8120
  - *Quercus ilex*
    - plant water relations, cavitation, geographical distribution, Sicily 3613
    - water stress, watersheds, Spain 1122
  - *Quercus robur*
    - forest decline
      - Poland
        - fungal diseases 1299
        - insect pests 1299
  - savanna woodlands, plant succession, simulation, Africa South of Sahara 4212
  - *Thuja occidentalis,* water stress, transpiration, adaptation 5281-5282
  - vegetation types, remote sensing, satellites, USA 7851
- **Drought injury**
  - *Acer saccharum*
    - frost resistance, sap flow, Canada 9676
    - plant composition, Canada, abscisic acid 278
  - *Nothofagus solandri,* seedlings, site preparation, New Zealand 6297
- **Drought resistance**
  - *Acacia,* seedling growth, sowing depth, temperature 4312
  - *Eucalyptus marginata,* photosynthesis, water stress, Australia 1123
  - Fabaceae, plant water relations, water stress 2570
  - forest trees, provenance trials, soil fertility, Israel 6013
  - fungal diseases, *Quercus,* forest decline, Italy 8119
  - *Mora,* flooding tolerance, plant water relations, Guyana 9716
  - *Picea mariana*
    - photosynthesis, plant physiology 5230
    - seedlings 3608
    - tree breeding, biomass, Canada 5477
  - *Pinus banksiana,* roots, plant physiology, protein synthesis 1273
  - *Pinus halepensis,* air pollution, ozone 3646
  - *Pinus ponderosa,* genetic variation, plant physiology, plant morphology, USA 1889
  - *Populus deltoides,* foliage, water balance, plant composition 1121
  - *Quercus*
    - water stress 4520
      - France 2830
  - *Quercus douglasii,* natural regeneration, plant competition, USA 4517
  - winter
    - *Larix laricina,* USA 1931
    - *Picea mariana,* USA 1931
- **Drought tolerance,** broadleaves, street trees, USA, testing 4509
- ***Dryobalanops,*** wood anatomy, identification 6406
- ***Dryobalanops aromatica***
  - genetic variation
    - isoenzymes, Brunei Darussalam 7365
    - population genetics, Brunei Darussalam 7364
  - improvement planting, Brunei Darussalam, spatial distribution, site factors 6926
  - seed germination, growing media, Peninsular Malaysia 7730
  - tissue culture, Brunei Darussalam 6893
- ***Dryobalanops beccarii***
  - seedlings, identification, Indonesia 1324
  - vegetative propagation, greenhouses, techniques 9452
- ***Dryobalanops lanceolata***
  - genetic variation, population genetics, Brunei Darussalam 7364
  - improvement planting, Brunei Darussalam, spatial distribution, site factors 6926
  - selective felling, soil degradation, Sabah, logging effects 8771
  - shoot cuttings 91, 6887
  - vegetative propagation, greenhouses, techniques 9452
- ***Dryobalanops rappa,*** genetic variation, population genetics, Brunei Darussalam 7364
- ***Dryobalanops sumatrensis,*** increment, silviculture, Peninsular Malaysia, plantations 2698
- ***Dryocoetes confusus***
  - insect pests
    - *Abies lasiocarpa*
      - Canada
        - aggregation pheromones 1489
        - chemical control 1489
- ***Dryocopus martius,*** birds, coniferous forests, fragmentation, ecology, Sweden 1521
- ***Dryocopus pileatus,*** birds, feeding behaviour, dead trees, bottomland forests, USA 6680
- ***Drypetes standleyi,*** flora, Venezuela 1326
- ***Duabanga,*** mangroves, geographical distribution, coastal areas, India 2120
- ***Duabanga moluccana***
  - Indonesia, wood chemistry 2059
  - seedling growth, NPK fertilizers, shading, Indonesia 6070
- ***Duboscia macrocarpa,*** species trials, agroforestry, acid soils, Cameroon 2542
- ***Duguetia,*** phylogeny, taxonomy 6521
- **Dunes**
  - coastal plant communities, New Zealand 1386
  - forest trees, plant succession, Netherlands 9952
  - *Pinus sylvestris,* plant succession, microclimate, Netherlands 1401
- ***Duranta,*** taxonomy, Australia 8129
- ***Durio macrantha,*** taxonomy, Indonesia 8980
- **Dwarfism**
  - forest trees
    - seedlings, morphogenesis 6397
    - witches' brooms, morphogenesis 6397
- ***Dysoxylum***
  - pollen, morphology, taxonomy 2039
  - wood chemistry, Indonesia 6448
- ***Dysoxylum acutangulum,*** wood anatomy, Indonesia 6407
- ***Dysoxylum caulostachyum,*** wood anatomy, Indonesia 6407
- ***Dysoxylum schiffneri,*** rain forests, seeds, survival, predation, Australia 4050
- ***Dysoxylum spectabile,*** synecology, canopy gaps, natural regeneration, New Zealand 1413
- **Earlywood**
  - *Quercus,* wood anatomy, vessels, France 4639
  - *Quercus robur,* latewood, cellulose, metabolism, UK 9853
- **Earthquakes,** *Pinus wallichiana,* growth rings, leaning stems, India 4605
- **East Africa**
  - farm forestry, land use, books 4166
  - mangrove forests, degradation, utilization 7299
- **East Asia**
  - broadleaves, medicinal plants, antibacterial properties 1813
  - farm forestry, land use, books 4166
  - forestry, forest ecology, vegetation types, books, conferences 5922
- **Easter Island,** *Sophora toromiro,* tissue culture, endangered species 1700
- **Eccentricity, stem** (*see* Stem form, eccentricities)
- **Ecology** (*see* Autecology; Forest ecology; Plant succession; Synecology)
  - periodicals 4143
- **Economic development,** forests, environment, biodiversity 40
- **Economic policy,** deforestation, Costa Rica 8544
- **Economics** (*see* Forest economics)
- **Ecosystems,** woody plants, agroforestry, semiarid zones, Sahel, books 8466
- **Ecuador**
  - agroforestry, development projects 4114
  - forestry, women 816
  - mountain forests, synecology, botanical composition, stand structure 3071
  - nature conservation, development projects 9299
  - *Polylepis incana,* chemotaxonomy 5436
  - rain forests
    - conservation, sustainability, biodiversity 9300
    - non-wood forest products, valuation 2782
    - soil properties 3078
    - stand characteristics, population dynamics 3952
    - synecology, botanical composition, stand structure 3071
  - *Rhizophora mangle,* natural regeneration, silvicultural systems, clear strip felling 9490
  - *Rustia,* taxonomy 7235
  - secondary forests, synecology, botanical composition, stand structure 3072
  - *Siparuna,* taxonomy 6518
  - tropical forests
    - conservation, research 9301
    - hunting, small mammals 5814
- **Edible fungi**
  - Christmas trees, Mexico, plantations, economics 6955
  - Italy, classification, keys, books 8468
  - legislation, Italy 6157
  - *Lentinula edodes,* insect pests, *Dacne japonica,* Japan 2340
  - *Morchella*
    - *Abies alba,* Spain, ecology 2677
    - *Pinus,* Spain, ecology 2677
  - radionuclides, uptake, soil types, Russia 7980
  - *Tuber*
    - forest plantations, Sardinia 6158
    - *Quercus suber,* Sardinia 207
  - *Tuber magnatum,* soil properties, Italy 987
  - *Tuber melanosporum, Corylus avellana,* mycorrhizas, biological competition 5575
  - understorey, control, Korea Republic 7812
  - USA 5165
- **Edible species**
  - *Acacia leucophloea,* seeds, plant composition 2061
  - Burkina Faso 967
  - canes and rattans
    - *Calamus simplicifolius,* chemistry 2057
    - *Daemonorops margaritae,* chemistry 2057
  - *Caryocar brasiliense,* cerrado, Brazil, reviews 8038
  - ethnobotany
    - India 986
    - medicinal plants, India 984
  - forest trees, bark, cooking, palatability 1810
  - fruits, cooking, palatability 1810
  - *Garcinia kola,* fruits, nutritive value 8921

Edible species *cont.*
- *Leucaena leucocephala,* seeds, gums, chemistry, rheological properties 430
- *Metroxylon sagu,* Indonesia 1809
- *Pinus contorta,* vegetation management, controlled burning, Canada 374
- *Pinus pinea,* seeds, production, stand characteristics, Portugal 1797
- *Populus tremuloides,* vegetation management, controlled burning, Canada 374
- *Vaccinium,* vegetation management, controlled burning, Canada 374
- *Xylia xylocarpa,* seeds, chemistry, India 6946

Education
- agroforestry
  - international cooperation, South East Asia 9267
  - training, conferences 5938
- forest management, France 9403
- forestry
  - China 5043
  - computer techniques 2514
  - land use, multiple use 5998
  - research, India, conferences, books 7624
  - Russia 5999
- forestry workers
  - Canada 2535-2536
  - professional competence, Australia 6004
- Italy, forest economics 7856
- private forestry, forest management, USA, surveys 53
- rain forests, forest resources, utilization, Nicaragua 1644
- training, Bangladesh 4248
- watersheds, management, projects, Cuba 4078

Egypt
- *Acacia,* sustainability, charcoal 3913
- mites
  - *Aceria dioicae, Tamarix nilotica,* galls 9177
  - *Dicruvasates tamaricis, Tamarix nilotica,* galls 9177
- multipurpose trees, species trials, reclamation, desert soils 3372

Ehretia ovalifolia, bark, chemistry, glucosides, lignans 9831

Ekebergia capensis, water stress, stomata, responses 5278

El Salvador, agroforestry, development projects, databases 10109

Elaeagnus angustifolia
- allelopathy, forest litter, soil, nitrification 1897
- bacterial diseases, Russia, disease vectors, *Scolytus jaroshevskii* 10017
- insect pests, *Scolytus jaroshevskii,* Russia, disease vectors 10017
- root nodules
  - *Frankia,* foliage, France, nutrients 1909
  - inoculation 4841
- tissue culture, explants 5104
- weed control, USA, herbicides 8643-8644

Elaeagnus angustifolia × Elaeagnus commutata, taxonomy, plant morphology, habit, Poland 2115

Elaeagnus oxycarpa
- bacterial diseases, Russia, disease vectors, *Scolytus jaroshevskii* 10017
- insect pests, *Scolytus jaroshevskii,* Russia, disease vectors 10017

Elaeagnus pungens
- container grown plants, irrigation, USA 6756
- insect pests, *Aphis,* biological control, natural enemies 4899

Elaeagnus umbellata
- biomass production, India, equations 789
- forest plantations, wood chemistry, USA 8919
- root nodules, histology 5586

Elaeocarpus angustifolius, rain forests, seeds, survival, predation, Australia 4050

Elaeocarpus ruminatus, rain forests, seeds, survival, predation, Australia 4050

Elaeocarpus sphaericus, Indonesia, wood chemistry 2059

Elaphomyces, mycorrhizas, *Picea abies,* enzymes 9993

Elateriospermum tapos, wood anatomy 414

Elatobium abietinum
- insect pests
  - *Picea sitchensis*
    - UK
      - fertilizers 2612
      - growth 3178

Electrical phenomena in trees
- *Aesculus hippocastanum,* France, measurement, sap flow 2081
- *Liquidambar styraciflua,* street trees, USA, measurement 778
- *Salix viminalis,* roots, plant physiology 455

Elephants
- *Loxodonta africana*
  - *Adansonia digitata,* browsing damage, Tanzania, simulation 4048
  - canopy gaps, tropical forests, Gabon 684
- *Loxodonta africana cyclotis, Sacoglottis gabonensis,* fruiting, Gabon 3223

Elmerillia ova, wood chemistry, Indonesia 6448

Embryology
- *Carpinus turczaninowii,* taxonomy 2054
- Fabaceae, Papilionoideae, taxonomy, evolution 8903
- gymnosperms, evolution 2940
- *Pinus sylvestris* 7169
- *Rhoiptelea chiliantha,* taxonomy 7166
- *Sorbus intermedia* 7167
- *Tetracentron sinense,* taxonomy 2053

Embryos
- development, *Picea glauca,* scanning electron microscopy 1228
- tissues, *Picea glauca,* genetic transformation, pollen, techniques 2196

Emmotum nitens, wood anatomy 6430

Employment, private forestry, forest economics, Canada, subsidies 9644

Encephalartos equatorialis, taxonomy, new species, Uganda 9900

Encoeliopsis laricina, fungal diseases, conifers 4169

Endangered species
- bamboos, *Neomicrocalamus mannii,* India 733
- *Banksia brownii,* reproductive behaviour, population genetics, Australia 3825
- birds, *Aimophila aestivalis,* forest management, USA 5817
- *Cercocarpus traskiae,* molecular genetics, USA 5518
- *Cinnamomum sulphuratum,* geographical distribution, India 8959
- *Cryptocarya caesia,* India 9896
- Cycadopsida, surveys, conservation 3703
- flora, national parks, conservation, planning, Canary Islands 8440
- forest fragmentation, synecology, Australia 10128
- forest trees
  - Amazonia, logging 1174
  - Paraguay 1577
- fungal diseases, *Phytophthora cinnamomi,* forest management, Australia 7395
- *Ginkgo biloba,* medicinal plants 209
- rain forests, gene banks, DNA 2174
- *Semecarpus,* Sri Lanka 10123
- *Sophora toromiro,* tissue culture, Easter Island 1700
- Sweden 4126
- *Taxus brevifolia,* medicinal plants 209
- *Uvaria cordata,* Sri Lanka 10123

Endiandra palmerstonii, rain forests, seeds, survival, predation, Australia 4050

Endoclita excrescens, insect pests, *Populus davidiana,* Korea Republic, resistance, heritability 8326

Endocronartium harknessii
- fungal diseases
  - *Pinus banksiana,* thinning, Canada, distribution 6632

Endocronartium harknessii *cont.*
- fungal diseases *cont.*
  - *Pinus contorta*
    - Canada, resistance 5641
    - stand density, Canada 6631
- in vitro culture, fungal diseases, *Pinus ponderosa* 2282

Endocronartium pini
- fungal diseases
  - *Pinus,* UK, inoculation, infection 9119
  - *Pinus sylvestris*
    - Finland 4022
      - disease vectors, insect pests 5752-5753

Endophytes
- *Albosynnema elegans, Poulsenia armata,* branches, Costa Rica 9067
- broadleaves, aquatic fungi, Pakistan 8253
- insect pests, *Thecodiplosis japonensis, Pinus,* Japan 8252
- *Larix laricina,* Canada 6607
- *Phialocephala compacta, Alnus glutinosa,* Germany 9068
- *Phialocephala scopiformis, Picea abies,* Germany 9068
- *Phoma, Taxus wallichiana,* Nepal, medicinal plants 3144
- *Pinus sylvestris,* foliage, acid deposition, Finland 2226
- *Solheimia costaspora, Inga goldmanii,* branches, Costa Rica 9067

Endospermum, photosynthesis, photoinhibition, Papua New Guinea, simulation, canopy gaps 1287

Endospermum labios, Formicidae, *Camponotus quadriceps,* Papua New Guinea, insect pests, interactions 1473

Energy, biomass, Brazil, wood properties 5047

Energy balance
- forests, evapotranspiration, China 8161
- simulation 6829
- treelines, forest influences, Canada 3693

Energy policy, fuelwood, utilization, forestry, legislation, Uruguay 8551

Energy relations
- broadleaves, Canada, measurement, techniques 6262
- *Eucalyptus tereticornis,* spacing, biomass production, increment, India 2657
- *Fraxinus pennsylvanica,* remote sensing, canopy, atmosphere, USA 1028

Energy resources
- climatic change, forestry, Sweden 4471
- forest influences, carbon dioxide enrichment, reviews 7130
- planning, fuelwood, degraded forests, India 57
- short rotation forestry, environmental factors, forest economics, USA, techniques 6100

Energy sources, peatlands, greenhouse effect 4250

Energy value, seasonal variation, broadleaves, India 2541

Engelhardia spicata, tropical forests, synecology, ground vegetation, biomass production, India 9933

Enkianthus, taxonomy 3044

Enrichment (*see* Improvement planting)

Entandrophragma excelsum, agroforestry, species trials, Rwanda 4961

Enterolobium contortisiliquum, seeds, Brazil, seed treatment, dormancy breaking 8574

Enterolobium cyclocarpum
- mycorrhizas, *Glomus aggregatum,* plant nutrition, phosphorus 5612
- plant water relations, drought, phenology, Costa Rica 2838
- species trials, reclamation, mined land, Venezuela 6711
- ultisols, fertilizers, seed size, pot experimentation 7758

Entrophospora colombiana, mycorrhizas, *Cordia alliodora,* seedling growth 1444

Environment
- forestry
  - books 5930

- **Environment** *cont.*
  - forestry *cont.*
    - development
      - India 5984
      - South East Asia 5984
    - Russia 44
    - social values, forest management, USA 7704
  - forestry development, India, conferences 6806
  - forests, biodiversity, economic development 40
  - history, periodicals 4995
  - nature reserves, research, Germany 5994
  - rain forests, deforestation, South East Asia 5864
  - stress factors, genetic variation, reviews, Europe 6583
- **Environmental assessment,** projects, USA 5988
- **Environmental degradation**
  - deforestation, community forestry, Nepal 8413
  - forestry machinery, design, environmental protection, research 9553
  - forests, land use, nature conservation, Sri Lanka 1578
  - riparian forests, forest influences, water quality, USA 5346
  - statistical analysis 7668
  - tropical forests, roads 4941
- **Environmental factors**
  - *Pinus sylvestris,* species diversity, Spain 5449
  - short rotation forestry
    - conferences 5942
    - energy resources, forest economics, USA, techniques 6100
  - tropical forests, species diversity 5447
- **Environmental impact**
  - assessment, boreal forests, forest management, Canada 9622
  - clear felling, North America, books 5923
  - deforestation, Switzerland 719
  - forest fires, Sicily 6377
  - forest roads, Switzerland 235
  - forestry machinery, mechanization, Sweden 5158
  - land use, change, logging, USA 7688
  - legislation, Switzerland 50
  - *Pinus taeda,* thinning, USA 6935
  - sewage sludge, disposal, USA, simulation 5855
  - visibility, forestry development 738
  - wetlands, USA 7082
- **Environmental management**
  - economics, old-growth forests, USA 9398
  - sustainability, mountain areas, Asia, books 2453
- **Environmental policy**
  - forests, international agreements, conferences, UN 769
  - UK, climatic change, books 267
- **Environmental protection**
  - afforestation, forest management, planning, permits, South Africa 6989
  - deforestation, non-governmental organizations, Indonesia 6862
  - development projects, logging, Philippines, planning, economics 46
  - forest management, sustainability, Latin America, books 7632
  - forestry machinery, design, environmental degradation, research 9553
  - fuel plantations, irrigated stands, research, development projects, Kenya 6001
  - land use, land classification, Italy 715
  - management, Developing Countries 4125
  - organizations, Iran 1874
- **Enzyme activity**
  - *Coriaria arborea,* root nodules, nitrogenase 2064
  - *Picea abies,* ozone, nutrient uptake 4708
- **Enzymes**
  - *Acer platanoides,* seeds, accelerated aging, storage, viability 842
  - *Acer pseudoplatanus*
    - biochemistry, tonoplast 3764
    - molecular genetics, laccase 8249
- **Enzymes** *cont.*
  - *Acer pseudoplatanus cont.*
    - rhizosphere, soil biology, root systems, UK 5274
  - ammonium, metabolism, mycorrhizas, *Pinus sylvestris* 4003
  - broadleaves, plant nutrition, nitrogen, seedling growth 5289
  - *Broussonetia papyrifera,* girdling, cytology 6401
  - *Castanea sativa,* foliage, shedding 3776
  - catalase, *Picea abies,* light 3769
  - enzyme activity, *Fagus sylvatica,* foliage 8933
  - *Erythrina variegata,* seedlings, flooding, effects, photosynthesis 6305
  - *Eucalyptus,* forest decline, plant nutrition, nitrogen, Australia 3635
  - *Eucalyptus gunnii,* periderm 460
  - farnesyl-diphosphate farnesyltransferase, purification, *Pinus pinaster,* foliage 8928
  - fungal diseases, *Phytophthora cinnamomi, Eucalyptus globulus,* roots 3772
  - β-glucosidase, xylem, *Pinus contorta,* lignin, synthesis 6473
  - β-glucuronidase, *Picea mariana,* embryo culture, genetic engineering 3975
  - glutamate dehydrogenase, *Pinus sylvestris,* foliage, air pollution, Germany 6479
  - glutathione transferase, *Picea abies,* foliage, metabolic detoxification 4705
  - induction
    - *Eucalyptus globulus,* seedlings, fungal diseases, mycorrhizas 3771
    - *Picea abies,* air pollution, ozone 3801
    - *Pinus sylvestris,* plant nutrition, light 1285
  - inhibitors, *Schizolobium parahybum,* seeds 9829
  - isoenzymes
    - *Pinus sylvestris,* foliage 3766
    - seasonal variation, broadleaves, foliage, UK 3770
    - superoxide dismutase, *Pinus sylvestris,* seed germination 6480
  - methyltransferase, *Populus interamericana,* molecular genetics 2087
  - mycorrhizas
    - *Amanita muscaria, Picea abies,* seedlings 7393
    - *Cenococcum geophilum*
      - *Picea abies* 9993
        - seedlings 7393
    - *Elaphomyces, Picea abies* 9993
    - *Eucalyptus* 5608
    - *Piceirhiza nigra, Picea abies* 9993
    - *Pisolithus tinctorius, Eucalyptus globulus,* roots 3772
    - *Russula ochroleuca, Picea abies* 9993
    - *Tylospora, Picea abies* 9993
  - nitrate reductase, *Quercus serrata,* seedlings, plant nutrition, plant composition 6316
  - peroxidases
    - *Acer pseudoplatanus,* cell culture 3775
    - amino acids, chemical composition, *Araucaria araucana,* cell walls 8100
    - *Picea abies*
      - air pollution, oxidants, Germany 3662
      - cell growth, ultrastructure, ethylene 8108
  - phosphoenolpyruvate carboxylase, *Picea abies,* genetic variation, phenotypes, air pollution 9856
  - phospholipase D
    - *Acer platanoides,* seeds, imbibition, storage 2067
    - *Acer saccharinum,* seeds, desiccation 2067
  - *Picea abies* 6486
    - carbon dioxide enrichment, gas exchange 2082
    - roots, measurement 3007
    - seeds, properties 6481
- **Enzymes** *cont.*
  - *Picea sitchensis,* rhizosphere, soil biology, root systems, UK 5274
  - Pinaceae, oleoresins 6495
  - *Pinus ponderosa,* air pollution, ozone, acid deposition 7093
  - *Pinus sylvestris*
    - chloroplast genetics 5416
    - plant nutrition, nitrogen, seedling growth, mycorrhizas 1140
    - seedlings, gene expression, light 3973
  - *Pinus taeda*
    - molecular genetics, cinnamyl-alcohol dehydrogenase 8226
    - seed development, isocitrate lyase 6471
    - seeds, catalase 8113
  - plasma membranes
    - adenosinetriphosphatase, *Pinus banksiana,* seedlings, frost resistance 6476
    - *Picea abies,* roots, aluminium, toxicity 6478
  - *Populus interamericana,* molecular genetics 7377
  - *Populus tremula* × *Populus alba,* genetic transformation, foliage 5543
  - *Populus tremuloides*
    - genetic engineering 2221
    - molecular genetics 5544
  - proteinases, *Pinus sylvestris,* cambium, wood anatomy, cell differentiation 9854
  - pyrophosphatases, *Acer pseudoplatanus,* salt tolerance, cell cultures 1286
  - *Rhus verniciflua,* laccase 8103
  - superoxide dismutase, *Acer platanoides,* seeds, viability, accelerated aging 7180
- ***Eperua falcata***
  - photosynthesis, soil fertility, Guyana 7193
  - plant water relations, gas exchange, French Guiana 4506
- ***Ephedra campylopoda,*** wood anatomy, vessels, cell differentiation 4658
- **Epicormics,** *Quercus kelloggii,* thinning, USA 2946
- **Epidermis**
  - anatomy, bamboos, *Thamnocalamus* 9789
  - Casuarinaceae, crystals, calcium oxalate 5382
  - *Eucalyptus,* foliage, anatomy 7165
  - morphology
    - mangroves, Rhizophoraceae, taxonomy, Nigeria 3724
    - Meliaceae, West Africa 394
  - *Pinus,* foliage, anatomy 1217
  - *Psidium guajava,* foliage, anatomy 7165
- ***Epinotia immundana,*** insect pests, *Alnus,* Germany 10042
- ***Epinotia nigricana,*** insect pests, *Abies alba,* Italy 9155
- ***Epinotia tenerana,*** insect pests, *Alnus,* Germany 10042
- ***Epipemphigus marginalis,*** insect pests, *Populus ciliata,* India, galls 632
- **Epiphytes**
  - broadleaves, Spain, synecology 1388
  - climbers, *Dacrycarpus dacrydioides,* synecology, New Zealand 3088
  - forest ecology, cloud forests, Costa Rica 3091
  - forest trees
    - air pollution, indicator plants, Sweden 6334
    - mycorrhizas, USA 9080
  - mangroves, Cyanobacteria, nitrogen fixation, Guadeloupe 537
  - *Melaleuca viridiflora,* controlled burning, stand structure, Australia 3089
  - *Ocotea tonduzii,* cloud forests, Costa Rica 1389
  - *Pinus nigra,* lichens, altitude, Greece 3945
  - *Populus tremula,* bark, chemistry, soil chemistry, Sweden 8168
  - rain forests
    - Colombia, spatial distribution 1387
    - Costa Rica 4784

- **Epiphytes** *cont.*
  - *Senecio cooperi,* plant nutrition, adventitious roots, Costa Rica 3732
  - tropical forests, arthropods, Mexico, interactions 6561
- ***Epirrita autumnata***
  - insect pests
    - *Betula,* Sweden, population dynamics, interactions 5714
    - mixed forests, Estonia, pheromones 9153
- **Equations**
  - forest trees
    - biomass, allometry, USA 4195
    - growth, canopy gaps, methodology 27
  - stand density 6958
  - statistical analysis, testing 6820
- **Equipment**
  - climate, measurement, simulation 1609
  - forest inventories, computers 9337
  - lasers
    - broadleaves, diameter, measurement 4448
    - forest inventories 1852, 4448
    - forest trees, measurement 1852
  - volume determination, computers 9337
- ***Erannis defoliaria,*** insect pests, *Quercus robur,* France, biology, population dynamics 2316
- ***Eremophila***
  - medicinal plants, Australia 3472
  - plant composition, secondary metabolites, reviews 3753
  - seed germination, reclamation, Australia 4264
  - uses, ethnobotany, Australia 192
- ***Erethizon dorsatum,*** wildlife, *Quercus gambelii,* USA, resource utilization 6675
- **Ergonomics**
  - forestry, safety, labour 822
  - research, South Africa 4249
- ***Erica arborea***
  - carbon dioxide enrichment
    - plant composition, Italy 7031
    - plant physiology, Italy 7031
  - forest fires, simulation, Portugal 7132
  - species trials, rehabilitation, Canary Islands 6032
  - stand development, Greece 4803
- **Ericaceae,** taxonomy 3044
- ***Eriobotrya japonica,*** foliage, trichomes, ultraviolet radiation, damage 7161
- ***Eriocrania***
  - insect pests
    - *Betula*
      - Sweden, population dynamics, interactions 5714
      - UK, interactions 2320
    - *Betula alba,* Finland, air pollution 4886
- ***Eriophyes,*** mites, broadleaves, galls, India 2371
- ***Eriophyes fraxinivorus,*** insect pests, *Fraxinus excelsior,* Irish Republic 5682
- ***Ernobius punctulatus,*** insect pests, *Pinus radiata,* USA, disease vectors 7400
- **Erosion**
  - afforestation, hydrology, Spain 9238
  - conifers, rangelands 7554
  - deforestation, China, history 3252
  - forest fires
    - Israel 8885
    - streams, Canada, sediment yield 8884
  - forest influences, hydrology, research, Thailand 358
  - forest roads, Korea Republic 8727
  - forestry, water pollution, legislation, USA 4938
  - *Fraxinus pennsylvanica,* floods, stand structure, Canada 3111
  - gully erosion, *Araucaria cunninghamii,* forest management, Australia, classification 7551
  - *Juniperus,* woodlands, remote sensing, USA 709
  - land use, deforestation, Tanzania 3249
  - *Libocedrus decurrens,* mycorrhizas, soil fungi, forest fires, USA 2243
  - logging
    - streams, water quality, USA 4578
- **Erosion** *cont.*
  - logging *cont.*
    - watersheds, Peninsular Malaysia 7110
  - measurement, *Araucaria cunninghamii,* Australia 7553
  - mechanics, riparian forests, riverbanks, UK 4086
  - mountain forests, land use, sustainability, India 9254
  - *Pinus edulis,* woodlands, remote sensing, USA 709
  - *Pinus radiata*
    - clear felling, burning, runoff, Chile 5843
    - forest plantations, hurricanes, remote sensing, New Zealand 5200
  - *Pseudotsuga menziesii,* mycorrhizas, soil fungi, forest fires, USA 2243
  - rain forests
    - canopy
      - precipitation
        - Sabah 8012
        - simulation 8012
    - clear felling, Sabah 1748
    - logging, runoff, Sabah 4087
  - risk, protection forests, Switzerland 10088
  - simulation, Italy 9239
  - soil, Italy 708
  - vegetation, soil types, geology, geomorphology, Spain 7859
  - woodlands
    - *Eucalyptus,* Australia 9241
    - runoff, USA 5837
- **Erosion control**
  - agroforestry
    - India 2416
    - sustainability, Indonesia 3262
    - watershed management, development projects, Haiti 7581
  - broadleaves, New Zealand 4942
  - *Coriaria nepalensis,* shoot cuttings, India 95
  - *Debregeasia hypoleuca,* shoot cuttings, India 95
  - *Desmanthus virgatus,* agroforestry, Philippines 5873
  - *Leucaena leucocephala,* agroforestry, Malawi 3256
  - mangroves, afforestation, India 3225
  - multipurpose trees, direct sowing, establishment, contour cultivation, Nicaragua 4945
  - protection forests, Russia, forest steppe 4943-4944
  - *Salix,* riverside plantations, Netherlands 5842
  - shelterbelts, soil properties, Canada 8386
  - social forestry, development projects, Nepal, economics 728
  - watersheds, development projects, water conservation, India 2394
  - *Woodfordia fruticosa,* shoot cuttings, India 95
  - woody plants, China, sand stabilization 9245
- ***Ervatamia corymbosa,*** plant composition, alkaloids 8078
- ***Erwinia amylovora***
  - bacterial diseases
    - *Crataegus,* flowering, Netherlands, control 612
    - *Sorbus,* USA 9122
- ***Eryotheca gracilipes,*** wood anatomy 6430
- ***Erythrina***
  - agroforestry, botany, nitrogen fixation, research, conferences 3309
  - vegetative propagation, indigenous knowledge, Nepal 6883
- ***Erythrina caffra***
  - seed germination, temperature 9435
  - tissue culture, metabolism, metabolites 2062
- ***Erythrina poeppigiana***
  - foliage, pruning, root nodules, Costa Rica, effects 9991
  - gas exchange, simulation, Costa Rica, growth, environmental factors 5411
  - mycorrhizas, *Glomus,* plant nutrition, nitrogen 5596
- ***Erythrina poeppigiana*** *cont.*
  - phenology, flowering, fruiting, Venezuela 5368
  - pruning, nutrition physiology, nitrogen fixation, Costa Rica 9733
- ***Erythrina senegalensis***
  - bark, isoflavones 8911
  - seeds, alkaloids 8911
- ***Erythrina suberosa,*** seed development, position effect, India 2944
- ***Erythrina variegata***
  - multipurpose trees, fibre plants, India 2678
  - seedling growth, photosynthesis, foliage, India 1261
  - seedlings, flooding, effects, photosynthesis, nitrate reductase 6305
- ***Erythrophleum chlorostachys,*** foliage, chemistry, Australia 7081
- ***Erythroxylum cuneatum,*** wood anatomy 414
- ***Erythroxylum monogynum,*** bark, roots, chemistry, tropane alkaloids 8916
- ***Erythroxylum suberosum,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- ***Escallonia pendula,*** choice of species, forestry development, South America 2551
- ***Eschweilera albiflora,*** natural regeneration, Brazil, seed predation, seed dispersal 3115
- ***Eschweilera sagotiana,*** photosynthesis, soil fertility, Guyana 7193
- **Essential oils**
  - *Abies balsamea,* Canada, terpenoids 2972
  - *Asteromyrtus,* chemotaxonomy 2118
  - chemistry
    - *Austromyrtus,* foliage 8075
    - *Eucalyptus,* foliage 8076
    - variation, *Eucalyptus,* chemotaxonomy, Australia 8094
  - *Cinnamomum,* plant composition, Sri Lanka 416
  - *Couroupita guianensis,* flowers 6441
  - *Croton,* Central Africa, volatile compounds 9802
  - *Eucalyptus*
    - Australia 3747
    - foliage, Australia 2973
    - species trials, chemotaxonomy, Australia 5399
  - *Eucalyptus globulus*
    - Mediterranean Region 6437
    - Portugal 3746
  - *Eucalyptus kirtoniana,* foliage, Mauritius 6440
  - *Eucalyptus polybractea,* irrigation, Australia 4376
  - forest trees
    - foliage, Japan, seasonal variation 6445
    - New Zealand 1806
  - *Guarea cedrata,* bark, Central African Republic 6439
  - *Juniperus,* chemotaxonomy, Italy 6516
  - *Juniperus phoenicea*
    - foliage, Italy 435
    - fruits, Italy 435
  - *Melaleuca alternifolia*
    - genetic variation, Australia 2220
    - medicinal plants, reviews 206
  - monoterpenes, yields, variation, *Eucalyptus camaldulensis,* Australia 3748
  - *Persea bombycina,* foliage 6438
  - *Phoeba porosa,* wood chemistry, Brazil 9801
  - *Picea abies,* foliage, ozone, Sweden 6446
  - *Pinus,* chemotaxonomy, Greece, plant composition 8686
  - *Pinus heldreichii,* Bosnia-Hercegovina 8917
  - *Pinus nigra,* chemistry 8918
  - production, *Eucalyptus globulus,* altitude, age of trees, India 9568
  - *Vitex negundo,* foliage 8079
  - yields, *Eucalyptus camaldulensis,* progeny testing, genetic gain, Zimbabwe 2201
- ***Essigella,*** insect pests, *Pinus* 5692
- **Estonia**
  - boreal forests, mosses 3944

- **Estonia** *cont.*
  - forest fragmentation, species diversity, models 8154
  - forest trees, yield forecasting, remote sensing, simulation 1866
  - forestry, statistics 9378
  - insect pests, *Epirrita autumnata,* mixed forests, pheromones 9153
  - *Picea abies*
    - foliage, light, plant morphology 7030
    - heartwood, increment, diameter, age of trees 1183
    - roots, decomposition, nitrogen cycle 7893
    - sapwood, increment, diameter, age of trees 1183
  - *Pinus sylvestris,* coniferous forests, clear felling, synecology 1363
  - plant succession, secondary forests, synecology, species diversity 3075
  - *Populus simonii,* amenity trees, frost injury 5904
  - woody plants, foliage, light, measurement, plant morphology 4660
- **Ethiopia**
  - *Acacia nilotica,* fruits, production, fodder 2670
  - *Acacia tortilis,* fruits, production, fodder 2670
  - *Cupressus lusitanica,* growth models, forest economics 6972
  - deserts, remote sensing, reflectance 1868
  - flora 1596
  - forests, remote sensing, reflectance 1868
  - mountain forests, synecology, botanical composition 3897
  - mycorrhizas, broadleaves, nitrogen fixation, forest nurseries 1446
  - *Sesbania sesban,* variety trials, fodder, production 9560
  - tropical forests, treelines, reviews 3917
- **Ethnobotany**
  - bamboos, reviews, Latin America 9562
  - biodiversity, books, methodology 5918
  - edible species
    - India 986
    - medicinal plants, India 984
  - *Eremophila,* uses, Australia 192
  - Fabaceae, bark, medicinal plants, India 4373
  - forest trees 803
    - medicinal plants, India, surveys 198
  - India 191
    - books 747
    - reviews 6697
    - veterinary medicine 6151
  - indigenous knowledge, deserts, Australia 7706
  - medicinal plants
    - Belize, books 745
    - books, conferences 748
    - Brazil 6153
    - Burundi, surveys 980
    - Europe, history, conferences 5937
    - Guatemala 983
    - India 202, 985, 6152, 6155, 7806
      - surveys 199
    - Namibia 982
    - Sabah, methodology 7811
    - São Tomé and Príncipe 4374
    - South Africa 981
    - surveys
      - Sabah 2674, 9566
      - Sarawak 2675
  - mountain forests, Uganda 7798
  - *Nyctanthes arbor-tristis,* medicinal plants, India 8687
  - rain forests, Sarawak 9555
  - riparian forests, stand characteristics, Kenya 194
  - surveys, medicinal plants, India 7810
  - woody plants, nomenclature, uses, reserved forests, Tanzania 964
- ***Eucallipterus tiliae,*** insect pests, *Tilia,* biological control, USA 4898
- ***Eucalyptus***
  - allelopathy, agroforestry, reviews 7318
  - beekeeping, forestry, South Africa 6150
  - biomass, site factors, Australia, theory 3332
- ***Eucalyptus*** *cont.*
  - birds, silvicultural systems, Australia, logging effects 7532
  - breeding programmes
    - Chile 1435
    - pulpwood production, intensive silviculture, South Africa 553
    - vegetative propagation, pulpwood production, South Africa 552
  - chemotaxonomy, Chile, essential oils 1236
  - clones, identification, genetic markers 5527
  - direct sowing
    - establishment
      - forest ecology, Australia, reviews 2636
      - plant physiology, Australia, reviews 2636
  - farm forestry, choice of species, direct sowing, Australia 10121
  - fertilizers, sewage, Australia 6069
  - foliage, essential oils, chemistry 8076
  - forest fires
    - forest ecology, simulation 2920
    - simulation, Australia 4608
  - forest influences
    - atmosphere, air pollution, Portugal, measurement 8499
    - soil toxicity, Australia 5354
  - forest litter
    - decomposition, soil organic matter, Congo 1912
    - foliage, fungi, Madagascar 7403
  - forest management, nature conservation, Australia 5194
  - forest plantations
    - Australia, research 3353
    - Brazil, development 49
    - Chile 6134
    - development projects, Rwanda 8535
    - forest influences
      - soil chemistry, lateritic soils, India 8023
      - soil properties, Australia 1185
    - forest policy, rural economy, Congo 8534
    - mortality, increment, drought, South Africa 7873
    - public opinion, Spain 5979
    - soil biology
      - India, seasonal variation 7940
      - plant parasitic nematodes, surveys 669
    - weed control, increment, South Africa, simulation 7786
  - fungal diseases
    - *Aulographina eucalypti,* Madagascar, foliage 7403
    - *Calonectria quinqueseptata,* Madagascar, foliage 7403
    - *Curvularia,* Indonesia, control 2280
    - *Harknessia hawaiiensis,* Madagascar, foliage 7403
    - *Helminthosporium,* Indonesia, control 2280
    - *Kirramyces epicoccoides,* Madagascar, foliage 7403
    - *Mycosphaerella heimii,* Madagascar, foliage 7403
    - *Pestalotia,* Indonesia, control 2280
    - *Phytophthora*
      - South Africa 8291
        - reviews 1452
    - *Pseudocercospora eucalyptorum,* Madagascar, foliage 7403
    - *Pythium*
      - South Africa 8291
        - reviews 1452
  - fungi, isolation, *Cryptococcus,* human diseases, Colombia 7713
  - hydrology, Australia 6370
  - insect pests
    - Australia 7421-7425
      - host parasite relationships, theory 4029
    - defoliation, soil properties, Australia 7286
    - *Helopeltis antonii,* Indonesia, buds 1481
    - Lepidoptera, Brazil 5713
- ***Eucalyptus*** *cont.*
  - insect pests *cont.*
    - *Phoracantha semipunctata*
      - biological control, USA 7500
      - biology 8344
      - USA
        - distribution 7469
        - resistance 5762
    - *Rhyparida limbatipennis,* forest decline, Australia 7204
    - tropical forests
      - Australia 3175
        - damage 3174
  - logging, hydrology, Australia, simulation 3336
  - mammals, *Vombatus ursinus,* Australia 10063
  - marsupials, *Gymnobelideus leadbeateri,* Australia, population dynamics 5818
  - mycorrhizas
    - enzymes 5608
    - plant nutrition, nitrogen 8273
  - national parks, land use, remote sensing, Landsat, Spain 6751
  - palaeoecology, Australia 3885
  - phosphorus fertilizers, mineralization, Australia 5110
  - plant water relations
    - water use, leaf area, equations, theory 7667
    - water use efficiency, measurement, techniques 9345
  - provenance trials
    - China 5941
    - species trials, Argentina 835
  - rain forests, palaeoecology, Australia 2132
  - reclamation
    - mined land, Venezuela 6711
    - saline soils, Australia 711
  - reptiles, *Oedura reticulata,* Australia, fragmentation 7531
  - roots, mechanics, heartwood, Australia 6405
  - savannas, ecotones, soil chemistry, Australia 3087
  - sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954
  - shelterbelts, crops, India 710, 9281
  - silvicultural systems
    - Australia 2628
    - forest economics, Brazil, returns 5217
  - silviculture
    - forest management, sustainability, South Africa 7794
    - forest plantations, research, Australia 4364
  - social forestry, development projects, choice of species, India 6737
  - soil amendments, wood ash, soil chemistry, Australia 1096
  - species, provenance, wood properties, variation, Malawi 4192
  - species trials
    - China 5941
    - frost resistance
      - Lesotho 2547
      - South Africa 7722
    - pulpwood production, South Africa 2552
    - reclamation, mine spoil, India 4949
    - saline soils, reclamation, Pakistan 6014
    - Sri Lanka 5055
  - stand characteristics, mortality, Italy 951
  - stems, mechanics, breakage, cavities in trees, Australia 5372
  - taxonomy
    - Australia 8130
    - keys, China 7619
    - new taxa, Australia 3856
  - tree breeding
    - genetic improvement, conferences 4182
    - South Africa 8190
  - vegetation types
    - remote sensing, image processing, Australia 2763

- ***Eucalyptus*** *cont.*
  - vegetation types *cont.*
    - soil chemistry, Australia, soil fertility 7272
  - vegetative propagation, Indonesia 6064
  - volume determination, India, equations 9579
  - weeds, *Pteridium aquilinum*, simulation, Australia 2508
  - wildlife
    - mammals, Australia 10062
    - marsupials, Australia, population dynamics 5819
  - wood anatomy, wood chemistry, reaction wood, lignin 5375
  - woodlands
    - erosion, Australia 9241
    - honey bees, birds, Australia 8356
    - remote sensing, satellites, image interpretation, Australia 7844
- ***Eucalyptus alba***
  - allelopathy 2158
  - extracts, *Shorea palembanica*, seedling growth, allelopathy 2160
  - species trials
    - fuel plantations, Nepal 6865
    - Sri Lanka 5054
  - taxonomy, Indonesia, new species 5433
- ***Eucalyptus albens***, population genetics, woodlands, fragmentation, Australia 5559
- ***Eucalyptus ammophila***, taxonomy, new species, Australia 3861
- ***Eucalyptus amplifolia***, short rotation forestry, USA 6098
- ***Eucalyptus amygdalina***
  - essential oils, chemistry, chemotaxonomy, Australia 8094
  - fauna, Formicidae, sclerophyllous forests, Australia 10028
- ***Eucalyptus angulosa***, essential oils, Australia 3747
- ***Eucalyptus baxteri***
  - wildlife
    - birds, thinning, Australia 5822
    - marsupials, thinning, Australia 5822
- ***Eucalyptus blakelyi***
  - insect pests, provenance, Australia, resistance 4031
  - mistletoes, *Amyema miquelii*, Australia, control 4879
- ***Eucalyptus brachycalyx***, foliage, essential oils, Australia 2973
- ***Eucalyptus brassiana***, provenance trials, India 1663
- ***Eucalyptus bridgesiana***, foliage, optical properties, Australia 6222
- ***Eucalyptus calophylla***
  - foliage, leachates, wetlands, Australia 8824
  - mycorrhizas, Australia, seasonal variation 5607
  - seed collection, forest soils, mine spoil, Australia 6466
- ***Eucalyptus camaldulensis***
  - agroforestry
    - browsing damage, sheep, Australia 9270
    - groundwater level, control, USA 5870-5872
    - salinity, control, USA 5870-5872
  - allelopathy, crops 545
  - coppice, understorey, synecology, India 522
  - early selection, genetic variation, isoenzymes, increment 4839
  - foliage
    - essential oils, monoterpenes, yields, Australia 3748
    - tissue culture, carbon dioxide enrichment, growth, anatomy 7741
  - forest influences, soil properties, Nigeria, land use 8024
  - forest nurseries, growing media, Sri Lanka 5115
  - forest plantations
    - plant composition, nutrients, Sri Lanka 5294
    - sand dune stabilization, Senegal 4939
    - species diversity, vegetation, surveys, Italy 1744
- ***Eucalyptus camaldulensis*** *cont.*
  - fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
  - fuelwood, India, calorific value 3361
  - fungal diseases
    - *Corticium salmonicolor*, Bangladesh, cankers 6633
    - Pakistan, seeds 2257
  - insect pests
    - Australia, damage 5681
    - Lepidoptera, Brazil 3181
    - provenance, Australia, resistance 4031
  - irrigated stands, volume determination, equations, Kenya 5960
  - molecular genetics, DNA, measurement, flow cytometry 1440
  - natural regeneration, soil, India 151
  - nitrogen fixation, measurement 1289
  - photosynthesis, photoinhibition 464
  - plant physiology, India 3784
  - plant water relations
    - Australia, plant composition, insect pests 3603
    - xylem, cavitation 8806
  - planting, Australia, tree guards, mulching 2637
  - progeny testing, genetic gain, essential oils, Zimbabwe 2201
  - provenance trials
    - forest influences, soil chemistry, India 66
    - India 3370
    - progeny testing, Chile 6028
  - reclamation
    - mined land, species trials, India 3246
    - species trials, saline soils, Australia 7715
  - salt tolerance, seed germination, seedling growth 5413
  - seedlings, salt tolerance, alkalinity, tolerance 2065
  - shelterbelts
    - irrigation, saline water 1534
    - microclimate, Italy, effects 6701
  - shoot cuttings, techniques 2604
  - shoots, growth, plant physiology, climate, Australia 3765
  - short rotation forestry, USA 6098
  - silvicultural systems, USA, growth 6090
  - site class assessment, increment, volume, soil types, Uruguay 1003
  - spacing, biomass production, India 1779
  - species trials
    - fuel plantations, Nepal 6865
    - Puerto Rico 1666
    - reclamation, mine spoil, India 2404
    - salt tolerance
      - Australia
        - growth 5052
        - survival 5052
    - shelterbelts, irrigation, saline water, Saudi Arabia 2559
    - Sri Lanka 5054-5055
  - stump removal, chemical treatment 5133
  - tissue culture, explants, metabolites, phenols 2606
  - tree breeding
    - clones, salt tolerance, waterlogging, Australia 3138
    - progeny testing, Australia, essential oils 6018
  - urban forestry, beekeeping, South Africa 6951
  - water management, saline water, agricultural land, USA 5866
  - water stress, tree breeding, selection criteria 6306
  - water uptake
    - flooding, Australia 2837
    - hydrology, Australia 8809
    - methodology, isotopes 3322
    - saline water, Australia 3616
  - water use, estimation, Australia 4079
  - waterlogging, salt tolerance, seedling growth, plant water relations, foliage 1115
- ***Eucalyptus camaldulensis* × *Eucalyptus tereticornis***, tissue culture, explants, metabolites, phenols 2606
- ***Eucalyptus camphora***
  - forest decline, plant nutrition, nitrogen, enzymes, Australia 3635
  - photosynthesis, photoinhibition 464
- ***Eucalyptus ceratocorys***, essential oils, Australia 3747
- ***Eucalyptus citriodora***
  - forest plantations, agroforestry, weed control, livestock, Brazil 6723
  - insect pests, *Thyrinteina arnobia*, Brazil 2326
  - molecular genetics, DNA, measurement, flow cytometry 1440
  - salt tolerance, seed germination, seedling growth 5413
- ***Eucalyptus citriodora* × *Eucalyptus torelliana***, molecular genetics, DNA, measurement, flow cytometry 1440
- ***Eucalyptus cladocalyx***, nectar, ecology, *Drosophila flavohirta* 5164
- ***Eucalyptus clandestina***, taxonomy, new species, Australia 3860
- ***Eucalyptus coccifera***
  - essential oils, chemistry, chemotaxonomy, Australia 8094
  - species trials, increment, Australia 3477
- ***Eucalyptus concinna***, foliage, essential oils, Australia 2973
- ***Eucalyptus confertiflora***, foliage, chemistry, Australia 7081
- ***Eucalyptus consideniana***, foliage, optical properties, Australia 6222
- ***Eucalyptus corrugata***, foliage, essential oils, Australia 2973
- ***Eucalyptus corynodes***, taxonomy, new species, Australia 3859
- ***Eucalyptus cypellocarpa***
  - synecology, site factors, simulation, Australia 3329
  - volume determination, Australia, equations 4389
- ***Eucalyptus cypellocarpa* × *Eucalyptus globulus***, hybrids, cold resistance, acclimatization, plant physiology, Portugal 1890
- ***Eucalyptus dealbata***, natural regeneration, artificial regeneration, farm forestry, Australia 7687
- ***Eucalyptus deglupta***
  - allelopathy 2158
  - extracts, *Shorea palembanica*, seedling growth, allelopathy 2160
  - foliage, progeny testing, Costa Rica 9985
  - forest plantations, increment, growth models, Indonesia 1828
  - fruiting potential, estimation, Indonesia, equations 1613
  - height, progeny testing, Costa Rica 9985
  - insect pests
    - *Agrilus sexsignatus*, Philippines, damage, control 1476
    - *Fergusonina tillyardi*, Philippines, damage, control 1476
    - *Strepsicrates ejectana*, Philippines, damage, control 1476
  - plant parasitic nematodes
    - *Fergusobia tumifaciens*
      - Philippines
        - control 1476
        - damage 1476
  - reclamation, degraded forests, development, Indonesia 7560
  - seed germination, liquid fertilizers, Indonesia 859
  - site class assessment, height, equations, Indonesia 1832
- ***Eucalyptus delegatensis***
  - essential oils, chemistry, chemotaxonomy, Australia 8094
  - mammals, logging effects, forest ecology, Australia 3194
  - marsupials
    - *Gymnobelideus leadbeateri*, wildlife conservation, Australia 9216
    - simulation, Australia 2388
  - provenance trials
    - increment, diameter, stem form, New Zealand 4258
    - wood properties, New Zealand 4592

Eucalyptus delegatensis *cont.*
- species trials
  - chemotaxonomy, essential oils, Australia 5399
  - increment, Australia 3477, 6190
- stand characteristics, mortality, simulation, Australia 2504
- synecology, site factors, simulation, Australia 3329
- yield forecasting, growth models, Australia 6193

Eucalyptus denticulata
- foliage
  - chemistry, provenance, chemotaxonomy, Australia 2986
  - lenticels, plant anatomy, Australia 8055
- species trials, chemotaxonomy, essential oils, Australia 5399

Eucalyptus diversicolor
- forest fires, Australia, damage 2919
- yield forecasting, growth models, Australia 6193

Eucalyptus dives, synecology, site factors, simulation, Australia 3329

Eucalyptus dolichorhyncha, essential oils, Australia 3747

Eucalyptus dunnii
- fertilizers, increment, Australia, insect pests 9138
- insect pests, *Cardiaspina,* Australia, control 9138
- molecular genetics, DNA, measurement, flow cytometry 1440
- mycorrhizas, *Pisolithus tinctorius,* host specificity 5611

Eucalyptus elliptica, plant morphology, taxonomy, Australia 496

Eucalyptus erythrandra, essential oils, Australia 3747

Eucalyptus exserta
- forest plantations
  - cycling, China, simulation 1139
  - nitrogen cycle, carbon cycle, China, simulation 4211

Eucalyptus fasciculosa, plant water relations, Australia 9717

Eucalyptus fastigata
- forest nurseries, herbicides, tolerance 8598
- fungal diseases, *Botrytis cinerea,* India 8293
- synecology, site factors, simulation, Australia 3329
- volume determination
  - Australia, equations 4389
  - stem form, equations 5169

Eucalyptus ficifolia
- nectar, ecology, *Drosophila flavohirta* 5164
- vegetative propagation, shoot cuttings, roots 2582

Eucalyptus forrestiana, essential oils, Australia 3747

Eucalyptus globoidea
- foliage, optical properties, Australia 6222
- wildlife
  - birds, thinning, Australia 5822
  - marsupials, thinning, Australia 5822

Eucalyptus globulus
- agroforestry
  - browsing damage, sheep, Australia 9270
  - crops, interface, microclimate, simulation 9357
  - economics, Australia 9284
  - groundwater, Australia 7579
- allelopathy
  - foliage, extracts 8175
  - plant composition, forest litter, Spain 7315
- altitude, increment, photosynthesis, India 9682
- breeding programmes, Chile 1435
- controlled burning, forest litter, cellulose, decomposition, Portugal 7140
- coppice
  - clear felling, hydrology, Portugal 3687
  - height, equations, Chile 3325
  - volume, equations, Chile 3325

Eucalyptus globulus *cont.*
- cycling, forest litter, Portugal 7913
- embryos, genetic transformation 9063
- essential oils
  - altitude, age of trees, India 9568
  - Mediterranean Region 6437
  - Portugal 3746
- forest fires
  - forest litter, cellulose, decomposition, Portugal 7140
  - nutrients, leaching 384
- forest litter
  - decomposition
    - forest influences, soil chemistry, Portugal 8026
    - Spain, phytotoxicity 7313
  - extracts, acidity, chelation, metal ions 8788
- forest nurseries, containers, testing, Chile 3425
- forest plantations
  - plant competition, Portugal, water availability, nutrients 4752
  - protection, natural regeneration, India 4811
  - saline soils, reclamation, Australia 9246
  - silviculture, Chile 3464
  - stand structure, canopy, simulation 7817
- fungal diseases
  - *Botrytis cinerea,* India 8293
  - *Mycosphaerella,* Australia, resistance 4869
  - *Phytophthora cinnamomi*
    - enzymes 8272
    - roots, enzymes 3772
- gas exchange, light 468
- genetic variation
  - foliage, morphology, Australia 5556
  - molecular genetics 8245
  - water stress, plant physiology, Portugal 1930
- hybrids, cold resistance, acclimatization, plant physiology, Portugal 1890
- increment 1007
- insect pests
  - Australia 7426
  - *Retithrips syriacus,* plant physiology 628
- marsupials, *Wallabia bicolor,* browsing damage, seedlings 5823
- molecular genetics, DNA, measurement, flow cytometry 1440
- mycorrhizas
  - *Descolea maculata,* Spain 8277
  - nitrogen fixation, forest nurseries, Ethiopia 1446
  - nutrient deficiencies, seedling growth 5609
  - *Pisolithus,* roots, enzymes 3155
  - *Pisolithus tinctorius*
    - enzymes 8272
    - infection, environmental factors 6615
    - roots
      - development, morphology 5573
      - enzymes 3772
    - symbiosis, molecular genetics 5570
- nitrogen fertilizers, plant nutrition 901
- nutrient deficiencies
  - books 6780
  - boron, China 6323
- ozone, gas exchange, growth, effects 6498
- photosynthesis, photoinhibition 464
- plant competition, *Casuarina equisetifolia,* plant nutrition, nitrogen fixation 6307
- plant growth regulators
  - gibberellins
    - buds 3768
    - cambium 3768
  - wood strength 6360
- planting, machinery, Chile 959
- progeny testing, genetic variation, frost resistance, Australia 8241
- provenance, identification, increment, traits, Australia 7724

Eucalyptus globulus *cont.*
- provenance trials
  - Australia, fungal diseases 4869
  - insect pests
    - Australia 2554
    - *Mnesampela privata,* Australia 2554
    - *Phylacteophaga froggatti,* Australia 2554
  - progeny testing, genetic variation, Chile 8237
- roots
  - development, fertilizers, irrigation, Portugal 8048
  - irrigation, fertilizers, soil properties, Portugal 8767
- seedlings, enzymes, induction, fungal diseases, mycorrhizas 3771
- shoot cuttings
  - genetic variation 5539
  - rooting 3396
  - techniques 2604
- site class assessment, increment, volume, soil types, Uruguay 1003
- species trials
  - chemotaxonomy, essential oils, Australia 5399
  - increment, Australia 6190
- tissue culture
  - explants, culture media 2595
  - micropropagation, culture media 1695
- waterlogging, salt tolerance, seedling growth, plant water relations, foliage 1115
- wood anatomy, xylem, fibres, differentiation 4627

Eucalyptus gomphocephala
- farm forestry, choice of species, direct sowing, Australia 10121
- planting, irrigation, saline water, Spain 160

Eucalyptus gracilis, water uptake, methodology, isotopes 3322

Eucalyptus grandis
- afforestation, grasslands, NPK fertilizers, India 3421
- biomass, estimation, volume determination, India, equations 8503
- carbon dioxide enrichment, plant nutrition 269
- cell culture, techniques 90
- coppice, understorey, synecology, India 522
- early selection, genetic variation, isoenzymes, increment 4839
- fertilizers
  - increment, Australia, insect pests 9138
  - sodium humate, seedling growth 8589
- forest nurseries, fertilizers, seaweed products, South Africa 9476
- forest plantations
  - diameter, increment, growth models, plant competition 9598
  - soil organic matter, Zimbabwe, forest litter, soil fertility 2812
- fungal diseases
  - Diaporthales, pathogenicity 2271
  - *Ganoderma sculptrutum,* provenance, Zimbabwe, susceptibility 9098
  - *Pythium splendens,* South Africa, pathogenicity 5632
- genetic variation, molecular genetics, vegetative propagation 8248
- growth models, soil water, water use efficiency, South Africa 9355
- insect pests
  - *Cardiaspina,* Australia, control 9138
  - Lepidoptera, Brazil 3181
- molecular genetics
  - clones, identification, South Africa 576
  - DNA, measurement, flow cytometry 1440
  - linkage 5555
- mycorrhizas
  - *Glomus etunicatum,* pesticides, toxicity 602
  - *Pisolithus* 5610
    - anatomy, host specificity 4006

Eucalyptus grandis *cont.*
- mycorrhizas *cont.*
  - *Pisolithus tinctorius*
    - biosynthesis, polypeptides 5579
    - seedlings, colonization 8281
  - *Scleroderma* 5610
- nitrogen fixation, measurement 1289
- nutrient deficiencies
  - books 6780
  - boron, China 6323
- photosynthesis
  - stomata, simulation 6468
  - transpiration, carbon dioxide enrichment 2086
- planting stock, USA 878
- sap, groundwater, isotopes, oxygen, South Africa 2832
- sap flow, measurement, techniques 308
- seedling growth
  - plant nutrition, nitrogen, phosphorus, simulation 32
  - soil compaction 6277
- seedlings
  - salt tolerance, alkalinity, tolerance 2065
  - water stress
    - abscisic acid, plant physiology 3018
    - turgor 2845
- shoot cuttings 3391
  - techniques 2604
- short rotation forestry
  - USA 6098
    - simulation 913
- site class assessment
  - equations, increment, height, South Africa 7824
  - increment, volume, soil types, Uruguay 1003
- soil properties, pulpwood production, quality, India 283
- soil water, increment, South Africa, simulation 7680
- species trials, salt tolerance, Australia, survival, growth 5052
- stockplants, light, quality, plant physiology, growth 5221
- transpiration, simulation, methodology 3612
- tree breeding
  - progeny testing, early selection, increment, Colombia 2225
  - wood properties, growth effects, South Africa 575
- water stress, tree breeding, selection criteria 6306
- yield forecasting, growth models, Australia 6193

Eucalyptus grandis* × *Eucalyptus camaldulensis
- cell culture, techniques 90
- molecular genetics, DNA, measurement, flow cytometry 1440
- tree breeding, wood properties, growth effects, South Africa 575
- water stress, plant physiology, ethylene, chlorophyll 6301

***Eucalyptus grandis* × *Eucalyptus robusta*,** water stress, plant physiology, ethylene, chlorophyll 6301

***Eucalyptus grandis* × *Eucalyptus tereticornis*,** tree breeding, wood properties, growth effects, South Africa 575

Eucalyptus grandis* × *Eucalyptus urophylla
- molecular genetics, DNA, measurement, flow cytometry 1440
- tissue culture, micropropagation, explants, culture media 4282
- tree breeding, wood properties, growth effects, South Africa 575

***Eucalyptus griffithsii*,** foliage, essential oils, Australia 2973

Eucalyptus gunnii
- cold resistance, heritability, France, provenance, growth 9053
- frost resistance, membranes 1893
- gene expression, genetic engineering 7375
- lignification, enzymes 4678
- periderm, enzymes 460

***Eucalyptus gunnii* × *Eucalyptus globulus*,** hybrids, cold resistance, acclimatization, plant physiology, Portugal 1890

Eucalyptus incrassata
- essential oils, Australia 3747
- foliage, lenticels, plant anatomy, Australia 8055

***Eucalyptus intermedia*,** species trials, salt tolerance, Australia, survival, growth 5052

***Eucalyptus johnstonii*,** species trials, increment, Australia 3477

***Eucalyptus kirtoniana*,** essential oils, foliage, Mauritius 6440

***Eucalyptus laevopinea*,** foliage, lenticels, plant anatomy, Australia 8055

Eucalyptus largiflorens
- photosynthesis, photoinhibition 464
- water uptake, methodology, isotopes 3322

***Eucalyptus longifolia*,** foliage, buffering capacity, acid rain 3691

***Eucalyptus loxophleba*,** farm forestry, choice of species, direct sowing, Australia 10121

***Eucalyptus macarthurii*,** forest nurseries, fertilizers, seaweed products, South Africa 9476

***Eucalyptus macrorhyncha*,** sclerophyllous forests, *Pinus radiata*, invasion, Australia 1414

Eucalyptus maculata
- agroforestry
  - Australia 6729
  - browsing damage, sheep, Australia 9270
- foliage, epidermis, anatomy 7165
- nutrient deficiencies
  - copper, assessment 5297
  - seedlings, symptoms 1146
- roots, soil physics, plant competition, Australia 3059
- sap flow, Australia, measurement 6300
- synecology, site factors, simulation, Australia 3329

Eucalyptus mannifera
- plant morphology, taxonomy, Australia 496
- soil chemistry, Australia, aluminium, growth 3573
- synecology, site factors, simulation, Australia 3329

Eucalyptus marginata
- artificial regeneration, seedbeds, site factors, predators, Australia 3441
- dendrochronology, forest fires, Australia 8463
- foliage, leachates, wetlands, Australia 8824
- forests, leaf area index, estimation, Australia 7661
- insect pests
  - *Perthida glyphopa*
    - Australia 5703
      - biology 5731
    - forest fires, Australia 6653
- mycorrhizas, Australia, seasonal variation 5607
- reclamation, mined land, understorey, Australia 1542
- sclerophyllous forests, seed germination, light, Australia 8180
- seed banks, seed germination, Australia, environmental factors 6572
- seedlings, photosynthesis, water stress, drought resistance, Australia 1123

***Eucalyptus melanoxylon*,** foliage, essential oils, Australia 2973

Eucalyptus melliodora
- foliage, optical properties, Australia 6222
- mistletoes, *Amyema miquelii*, Australia, control 4879
- photosynthesis, photoinhibition 464
- species trials, salt tolerance, Australia, survival, growth 5052

Eucalyptus microcorys
- air pollution, sulfur dioxide, growth, plant composition 3663
- forest management, nature conservation, Australia 1580

Eucalyptus microcorys *cont.*
- tissue culture, culture media, planting stock 5073

Eucalyptus microtheca
- fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
- irrigated stands
  - provenance trials, plant physiology, plant water relations, Kenya 6022
  - soil chemistry, nutrients, Kenya 6371

Eucalyptus miniata
- foliage, chemistry, Australia 7081
- insects, Formicidae, controlled burning, Australia 378

Eucalyptus moluccana
- species trials
  - salt tolerance
    - Australia
      - growth 5052
      - survival 5052
- tree guards, seedling growth, Australia 5129

Eucalyptus muellerana
- forest fires, Australia, damage 2919
- synecology, site factors, simulation, Australia 3329

Eucalyptus nitens
- chloroplast genetics, population genetics, Australia 2213
- fertilizers, nutrient deficiencies, copper, Australia 1717
- flowering, induction, plant growth regulators, Australia 4734
- foliage, chemistry, provenance, chemotaxonomy, Australia 2986
- forest nurseries, fertilizers, seaweed products, South Africa 9476
- genetic polymorphism, inheritance 5526
- genetic variation, Australia, insect pests, defoliation 7461
- insect pests, *Chrysophtharta bimaculata*, Australia, defoliation 7461
- marsupials, *Wallabia bicolor*, browsing damage, seedlings 5823
- plant growth regulators
  - gibberellins
    - buds 3768
    - cambium 3768
- progeny testing, genetic variation, frost resistance, Australia 8241
- roots, nutrients, analysis, techniques 5010
- seedlings, browsing damage, Australia, productivity 8711
- site preparation, weed control, nitrogen-phosphorus fertilizers, Australia 3463
- species trials
  - chemotaxonomy, essential oils, Australia 5399
  - increment, Australia 6190
- volume determination, Australia, equations 4389

Eucalyptus nitida
- essential oils, chemistry, chemotaxonomy, Australia 8094
- foliage, optical properties, Australia 6222

Eucalyptus obliqua
- essential oils, chemistry, chemotaxonomy, Australia 8094
- fauna, Formicidae, sclerophyllous forests, Australia 10028
- foliage, optical properties, Australia 6222
- injuries, wood defects, Australia 5344
- silviculture, forest ecology, Australia, Carabidae 7417
- volume determination, Australia, equations 4389
- wildlife
  - birds, thinning, Australia 5822
  - marsupials, thinning, Australia 5822
- yield forecasting, growth models, Australia 6193

Eucalyptus occidentalis
- afforestation, hydrology, erosion, Spain 9238
- forest plantations
  - silvicultural conversion, coppice, runoff, Italy 4935

Eucalyptus occidentalis cont.
- forest plantations *cont.*
  - species diversity, vegetation, surveys, Italy 1744
- water harvesting, contour ridging, Israel, slope, aspect 9511

Eucalyptus oleosa
- mistletoes
  - *Amyema preissii,* host parasite relationships, seed germination, seedling growth 5674
  - *Lysiana exocarpi,* host parasite relationships, seed germination, seedling growth 5674
- seed germination, temperature 76
- water uptake, methodology, isotopes 3322

Eucalyptus orophila, taxonomy, Indonesia, new species 5433

Eucalyptus ovata, forest decline, plant nutrition, nitrogen, enzymes, Australia 3635

Eucalyptus pauciflora
- biomass distribution, altitude, Australia 4484
- essential oils, chemistry, chemotaxonomy, Australia 8094
- forestry practices, soil biology, microorganisms, Australia 7927
- photosynthesis, reviews, photoinhibition 5415
- synecology, site factors, simulation, Australia 3329

Eucalyptus pellita
- afforestation, mixtures, degraded land, reclamation, Australia 3233
- molecular genetics, DNA, measurement, flow cytometry 1440
- nutrient deficiencies, books 6780
- taxonomy, Indonesia, new species 5433

Eucalyptus perriniana
- tissue culture
  - cell culture
    - metabolites
      - eucalyptol 2580
      - sesquiterpenoids 2581
  - metabolites, camphor 2578

Eucalyptus pilularis
- air pollution, sulfur dioxide, growth, plant composition 3663
- mycorrhizas, Basidiomycotina 5597
- roots, soil physics, plant competition, Australia 3059
- thinning, planning, Australia 4351
- yield forecasting, growth models, Australia 6193

Eucalyptus pimpiniana, foliage, essential oils, Australia 2973

Eucalyptus polyanthemos, establishment, shelter, microclimate, Australia 3442

Eucalyptus polybractea
- cell culture, cell suspensions, enzymes, lyases 4702
- cell suspensions, phenylalanine 9450
- irrigation, essential oils, Australia 4376

Eucalyptus populnea, transpiration, sap flow, Australia, measurement 6813

Eucalyptus praecox, plant morphology, taxonomy, Australia 496

Eucalyptus pulchella, essential oils, chemistry, chemotaxonomy, Australia 8094

Eucalyptus quadrangulata, foliage, lenticels, plant anatomy, Australia 8055

Eucalyptus radiata
- essential oils, chemistry, chemotaxonomy, Australia 8094
- volume determination, Australia, equations 4389

Eucalyptus raveretiana
- species trials
  - salt tolerance
    - Australia
      - growth 5052
      - survival 5052

Eucalyptus regnans
- air pollution, sulfur dioxide, growth, plant composition 3663
- basal area, foliage, soil chemistry, New Zealand 4394
- birds, *Calyptorhynchus funereus,* forest management, Australia 4066

Eucalyptus regnans cont.
- clear felling, soil physical properties, Australia, logging effects 5237
- essential oils, chemistry, chemotaxonomy, Australia 8094
- forest fires, soil properties, Australia 7137
- forest fragmentation
  - Australia
    - *Trichosurus caninus*
      - population dynamics 8363
      - population genetics 8364
      - simulation 8363-8364
- genetic variation, Australia, insect pests, defoliation 7461
- injuries, wood defects, Australia 5344
- insect pests
  - *Chrysophtharta bimaculata*
    - Australia 6656
      - defoliation 7461
      - predators 5738
- logging, Australia, buffer zones, planning 10086
- mammals, logging effects, forest ecology, Australia 3194
- marsupials
  - *Gymnobelideus leadbeateri,* wildlife conservation, Australia 9216
  - *Petauroides volans,* forest management, Australia 1525
  - simulation, Australia 2388
  - *Wallabia bicolor*
    - browsing damage, seedlings 5823
    - tree guards, damage 6691
- plant water relations, water use, leaf area, equations, theory 7667
- seedlings
  - browsing damage, Australia, productivity 8711
  - plant competition, pot experimentation 3867
- seeds, forest fires, Australia, insulation 2100
- soil pH, seed germination, controlled burning, Australia 5365
- species trials
  - chemotaxonomy, essential oils, Australia 5399
  - increment, Australia 6190
- stand characteristics, mortality, simulation, Australia 2504
- stand density, natural thinning, growth models 9538
- thinning, biomass production, light, Australia 8650
- wood density, stem form, wind 351
- yield forecasting, growth models, Australia 6193

Eucalyptus resinifera, molecular genetics, DNA, measurement, flow cytometry 1440

Eucalyptus rhombica, taxonomy, new species, Australia 3859

Eucalyptus risdonii
- essential oils, chemistry, chemotaxonomy, Australia 8094
- foliage, morphology, taxonomy 494

Eucalyptus robusta
- allelopathy 2158
- molecular genetics, DNA, measurement, flow cytometry 1440
- species trials, salt tolerance, Australia, survival, growth 5052
- waterlogging, salt tolerance, seedling growth, plant water relations, foliage 1115

Eucalyptus rossii
- fire danger, fuels, moisture, Australia 372
- sclerophyllous forests, *Pinus radiata,* invasion, Australia 1414
- synecology, site factors, simulation, Australia 3329

Eucalyptus rudis, seed germination, temperature 76

Eucalyptus rugosa, foliage, essential oils, Australia 2973

Eucalyptus saligna
- early selection, genetic variation, isoenzymes, increment 4839

Eucalyptus saligna cont.
- forest plantations, diameter, increment, growth models, plant competition 9598
- growth models
  - Costa Rica 222
  - Guatemala 222
  - site factors, Cameroon 8701
- insect pests, Lepidoptera, Brazil 3181
- molecular genetics
  - DNA, measurement, flow cytometry 1440
  - DNA hybridization, techniques 5533
- short rotation forestry, USA, simulation 913
- wildlife, forest plantations, understorey, Brazil 7515
- wood density, Brazil, equations, age 9583

Eucalyptus salmonophloia
- mistletoes, *Amyema miquelii,* Australia, spatial distribution 7413
- natural regeneration, seed banks, seed predation, Australia 8141
- transpiration, Australia 3596
- woodlands, recruitment, Australia, reproductive behaviour 6573

Eucalyptus sargentii, water harvesting, contour ridging, Israel, slope, aspect 9511

Eucalyptus scoparia, plant morphology, taxonomy, Australia 496

Eucalyptus sideroxylon
- agroforestry, browsing damage, sheep, Australia 9270
- foliage, epidermis, anatomy 7165
- photosynthesis, photoinhibition 464
- urban forestry, beekeeping, South Africa 6951

Eucalyptus sieberi
- essential oils, chemistry, chemotaxonomy, Australia 8094
- fungal diseases, *Botrytis cinerea,* India 8293
- logging, Australia, buffer zones, planning 10086
- secondary forests, controlled burning, simulation, Australia 2497
- wildlife
  - birds, thinning, Australia 5822
  - marsupials, thinning, Australia 5822

Eucalyptus smithii, fungal diseases, *Botrytis cinerea,* India 8293

Eucalyptus spathulata, tree breeding, clones, salt tolerance, waterlogging, Australia 3138

Eucalyptus stellulata, shoot cuttings, etiolation 8576

Eucalyptus stoataptera, Australia 3855

Eucalyptus stoatei, essential oils, Australia 3747

Eucalyptus taurina, taxonomy, new species, Australia 3859

Eucalyptus tenuiramis
- essential oils, chemistry, chemotaxonomy, Australia 8094
- foliage, morphology, taxonomy 494
- mycorrhizas, Australia 2244

Eucalyptus tereticornis
- agroforestry
  - fuelwood, India 6726
  - increment, India 4110
  - India, fungal diseases 7402
- allelopathy, crops 545
- biomass, estimation, volume determination, India, equations 8503
- coppice, growth, India 1734
- farm forestry
  - India 1549
  - soil fertility, India 2902
- forest litter
  - decomposition, sandy loam soils, laboratory tests 5264
  - India 3582
- forest nurseries, growing media, Sri Lanka 5115
- forest plantations
  - plant nutrition, biomass production, India 7973
  - sample plot technique, growth models 6210

Eucalyptus tereticornis *cont.*
- forest plantations *cont.*
  - soil amendments, soil types, India 883
- forests, soil chemistry, India, statistical analysis 1901
- fuel plantations
  - diameter, India, equations 1615
  - height, India, equations 1615
  - irrigated stands, biomass production, water use efficiency, Kenya 6021
  - water conservation, water use, India 699
- fuelwood, India, calorific value 3361
- fungal diseases
  - *Calonectria quinqueseptata*
    - India
      - agroforestry 7402
      - climatic factors 7402
- hybrids, species trials, India 8565
- insect pests
  - *Coptotermes heimi,* India 2309
  - Isoptera, India 10035
  - Lepidoptera, Brazil 3181
  - *Odontotermes,* India 2309
- molecular genetics, DNA, measurement, flow cytometry 1440
- nutrient deficiencies, boron, China 6323
- parasitic plants, *Santalum album,* increment, India 186
- plant physiology, India 3784
- pollen germination, plant growth regulators 2095
- provenance trials
  - India 8563
  - irrigated stands, Kenya 6023
- salt tolerance, seed germination, seedling growth 5413
- seedling growth
  - animal manures, water stress, pot experimentation 1712
  - biofertilizers, Puerto Rico 1713
  - nitrogen-phosphorus fertilizers, water stress, pot experimentation 1712
  - NPK fertilizers, pot experimentation 3417
  - photosynthesis, foliage, India 1261
- seedlings, salt tolerance, alkalinity, tolerance 2065
- short rotation forestry, USA 6098
- site class assessment, increment, volume, soil types, Uruguay 1003
- social forestry, development projects, India 8437
- spacing, biomass production, increment, energy relations, India 2657
- species trials
  - fuel plantations, Nepal 6865
  - Puerto Rico 1666
  - reclamation
    - fly ash, India 9248
    - mine spoil, India 2404
  - salt tolerance
    - Australia
      - growth 5052
      - survival 5052
  - Sri Lanka 5054-5055
- tissue culture, explants, metabolites, phenols 2606
- water stress, tree breeding, selection criteria 6306
- waterlogging, salt tolerance, seedling growth, plant water relations, foliage 1115
- wood properties, air pollution, India 1987

Eucalyptus tereticornis* × *Eucalyptus camaldulensis, tissue culture, explants, metabolites, phenols 2606

Eucalyptus tereticornis* × *Eucalyptus grandis, molecular genetics, DNA, measurement, flow cytometry 1440

Eucalyptus tetraptera, essential oils, Australia 3747

Eucalyptus tetraptera* × *Eucalyptus stoatei, Australia 3855

Eucalyptus tetrodonta
- foliage, chemistry, Australia 7081
- insects, Formicidae, controlled burning, Australia 378

Eucalyptus tetrodonta *cont.*
- photosynthesis, carbon dioxide enrichment, light, temperature, vapour pressure 8937
- seedlings, carbon dioxide enrichment, stomata, leaf conductance 3597

Eucalyptus tholiformis, taxonomy, new species, Australia 3859

Eucalyptus todtiana, farm forestry, choice of species, direct sowing, Australia 10121

Eucalyptus torelliana
- molecular genetics, DNA, measurement, flow cytometry 1440
- species trials, Sri Lanka 5054

Eucalyptus torquata, foliage, essential oils, Australia 2973

Eucalyptus trabutii, forest plantations, species diversity, vegetation, surveys, Italy 1744

Eucalyptus urnigera, species trials, increment, Australia 3477

Eucalyptus urograndis, pulpwood production, harvesting, nutrients, Brazil 9723

Eucalyptus urophylla
- early selection, genetic variation, isoenzymes, increment 4839
- forest plantations
  - increment, growth models, Indonesia 1833
  - weeds, damage, Indonesia 1755
- fungal diseases
  - *Fusarium,* Indonesia, chemical control 1502
  - *Pythium,* Indonesia, chemical control 1502
- genetic variation, molecular genetics, vegetative propagation 8248
- insect pests
  - Lepidoptera
    - Brazil
      - control 5802
      - population dynamics 5729
  - *Macrotermes malaccensis,* Indonesia, chemical control 1502
  - *Schedorhinotermes malaccensis,* Indonesia, chemical control 1502
- molecular genetics
  - DNA, measurement, flow cytometry 1440
  - linkage 5555
- mycorrhizas, *Pisolithus tinctorius,* seedlings, colonization 8281
- nutrient deficiencies
  - books 6780
  - boron, China 6323
- population genetics, isoenzymes, Indonesia 591
- progeny testing, genetics, plant morphology, Indonesia 2204
- species trials, Zaire 8566
- taxonomy, Indonesia, new species 5433

Eucalyptus urophylla* × *Eucalyptus alba, molecular genetics, DNA, measurement, flow cytometry 1440

Eucalyptus urophylla* × *Eucalyptus grandis, mycorrhizas, *Pisolithus tinctorius,* seedlings, colonization 8281

Eucalyptus verrucata, nomenclature, taxonomy, Australia 5434

Eucalyptus verrucosa, nomenclature, taxonomy, Australia 5434

Eucalyptus viminalis
- mycorrhizas, *Pisolithus tinctorius,* host specificity 5611
- soil water regimes, seedling growth, water uptake, pot experimentation 3595
- volume determination, Australia, equations 4389
- water stress, tree breeding, selection criteria 6306

Eucalyptus viminalis* × *Eucalyptus globulus, hybrids, cold resistance, acclimatization, plant physiology, Portugal 1890

Eucalyptus wandoo
- farm forestry, choice of species, direct sowing, Australia 10121
- seed germination, temperature 76
- transpiration, Australia 3596

Eucalyptus wetarensis, taxonomy, Indonesia, new species 5433

Eucommia ulmoides, species trials, exotics, arboreta, New Zealand 2545

Eugenia
- foliage, anatomy, Brazil, keys 2038
- taxonomy, Thailand 8972

Eugenia dysenterica, reproductive behaviour, Brazil 3027

Eugenia lineata, Indonesia, wood chemistry 2059

Eugenia mabaeoides, foliage, Sri Lanka, chemical composition 3751

Eugenia polyantha, Indonesia, wood chemistry 2059

Eugenia salamensis, plant water relations, drought, phenology, Costa Rica 2838

Euglossa, insects, deforestation, Brazil, ecology 619

Eulecanium transvittatum, insect pests, *Acer negundo,* Turkey 7435

Euodia, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287

Euonymus japonicus
- insect pests
  - *Homalodisca coagulata,* biology 8329
  - *Lasioptera yadokariae,* Japan 7493
- reclaimed land, marine sediments, Japan, stand development 6703

Euphorbia alluaudii, Arid Regions, stand structure, natural regeneration, Madagascar 8998

Euphorbia fiherenensis, Arid Regions, stand structure, natural regeneration, Madagascar 8998

Euphorbia laro, Arid Regions, stand structure, natural regeneration, Madagascar 8998

Euphorbia stenoclada, Arid Regions, stand structure, natural regeneration, Madagascar 8998

Euphorbia tanquahuete, latex, Mexico, terpenoids, steroids 1242

Euphorbiaceae, rain forests, species diversity, forest litter, measurement, Sabah 2823

Euphydryas maturna, insect pests, *Viburnum opulus, Fraxinus excelsior,* Sweden, parasitoids 5708

Eupseudosoma aberrans
- insect pests
  - *Eucalyptus,* Brazil 3181
  - *Eucalyptus urophylla,* Brazil, control 5802

Eupseudosoma involuta, insect pests, *Eucalyptus urophylla,* Brazil, control 5802

Euptelea polyandra, pioneer species, topography, plant morphology, Japan 8765

Europe
- agroforestry 5881-5882
  - Temperate Zones 5888
- air pollution
  - damage, forest economics 2779
  - nitrogen, research projects 5305, 6329
  - nitrogen cycle, soil chemistry, nitrogen, saturation 5322-5323
- alpine vegetation, air pollution, throughfall, soil chemistry 5321
- *Betula,* autecology 386
- birds, ecology 10077
- boreal forests, forest management, sustainability, international cooperation 9941
- *Castanea sativa,* genetic variation, evolution 1437
- coniferous forests
  - air pollution, throughfall, soil chemistry 5321
  - nitrogen cycle, carbon cycle, simulation 9364
- conifers
  - biogeochemistry, acid deposition, throughfall, soil chemistry 3664
  - denitrification, nitrogen cycle, measurement 3575
  - fertilizers, irrigation, acid deposition 3632
- ethnobotany, medicinal plants, history, conferences 5937
- *Fagus sylvatica,* stem form, eccentricities, genetic variation 5519

Europe *cont.*
- farm forestry, afforestation, agricultural land 10093
- flora, species diversity, conservation 8138
- forest decline, air pollution 5417
- forest ecology, air pollution, radionuclides, conferences 4177
- forest health, assessment, sampling 1303
- forest influences, silviculture 7130
- forest management
  - protection of forests 2518
  - sustainability, protection of forests, conferences 2484
- forest policy, rural areas, development, planning 9375
- forest resources 6841
  - books 9320
- forest trees
  - forest decline, genetic variation 6583
  - genetic resources, conservation, networks 2176
  - phenology, climatic change 4618
- forestry
  - forest policy, Canada 43
  - history, sociology 9384
  - landscape, periodicals 743
- forests, air pollution, assessment 1163
- fruit trees, wild relatives, genetic resources 7366
- fuel plantations, afforestation, agricultural land 8553
- fungal diseases
  - *Ceratocystis fimbriata, Platanus,* street trees 5646
  - *Cryphonectria parasitica, Castanea sativa,* biological control 7412
  - *Ophiostoma, Quercus,* forest decline 4020
  - *Ophiostoma roboris, Quercus robur* 7398
  - Ophiostomatales, spread 8299
  - *Quercus ilex,* foliage 5654
- genetic variation, environment, stress factors, reviews 6583
- ground vegetation, synecology, forest borders 9012
- heathlands, nature conservation 3931
- hedges, history 5844
- insect pests
  - *Caloptilia,* broadleaves, taxonomy 9154
  - *Cinara pini, Pinus,* taxonomy 630
  - *Dreyfusia nordmannianae*
    - *Abies alba,* biology 634
    - *Picea orientalis,* biology 634
  - forest trees 2305
  - *Thecodiplosis brachyntera, Pinus sylvestris* 5769
- peatlands, nature conservation, books 6781
- *Picea abies*
  - forest plantations, forest influences, soil properties 1185
  - mountain forests, genetic variation 6583
  - research 8492
  - waxes, leaf age, forest decline 6443
- *Pinus,* indicator plants, air pollution, chlorinated hydrocarbons 1978
- *Pinus sylvestris*
  - bark, air pollution, sulfates 8848
  - branches, evapotranspiration, stand density 7146
  - foliage, pesticide residues 5343
  - forest litter
    - foliage
      - measurement
        - biomass production 7902
        - climate 7902
  - forest plantations, forest influences, soil properties 1185
  - genetic variation, population genetics 572
  - population genetics, isoenzymes 2185
  - provenance trials, IUFRO 831
- pollen analysis, vegetation, history, carbon cycle 2125
- private forestry, reviews 6249, 8749-8750
- *Quercus*
  - forest decline, diseases, reviews 4720

Europe *cont.*
- *Quercus cont.*
  - genetic variation, population genetics, isoenzymes 5557
  - genetics, breeding programmes, conferences 3306
- *Quercus petraea,* genetic variation, isoenzymes 9060
- riparian forests, synecology 3934
- *Salix,* geographical distribution, analysis 2137
- selection system
  - history 912
  - reviews 912
- shelterbelts, history 5844
- soil chemistry, acid deposition, simulation 5338
- woody plants
  - geographical distribution 7262
  - species diversity, vegetation types 2149

European Communities
- forest resources, forest products industries, politics 804
- forestry
  - forest policy, Canada 43
  - public sector 809

European Union
- afforestation
  - agricultural land, planning 8523
  - subsidies 1638
- forest trees, tree breeding, legislation 3966
- *Juglans,* afforestation, agricultural land 2632
- membership, forestry, Sweden 1627
- refuse tips, legislation, Germany 9401

Eurytetranychus buxi, mites, *Buxus sempervirens,* Poland 2370

Eutectona machaeralis
- insect pests
  - *Tectona grandis*
    - control 671
    - development 7456
    - entomogenous fungi, *Beauveria bassiana* 5710

Euura amerinae, insect pests, *Salix pentandra,* plant composition, phenolic glucosides 5768

Evaporation
- broadleaves, forest litter, Japan, simulation 4491
- diurnal variation, seasonal variation, *Salix viminalis,* Sweden 4080
- *Pinus,* forests, simulation 8511
- savannas, simulation 8511

Evapotranspiration
- boreal forests, soil water balance, Canada 7949
- *Chamaecyparis obtusa*
  - forest influences, microclimate, Japan 1117
  - soil water, Japan 3600
- coniferous forests, Canada 1926
- *Fagus sylvatica,* foliage, carbon dioxide enrichment 1882
- forests
  - Canada, simulation 7948
  - energy balance, China 8161
- mixed forests, clear strip felling, runoff, Japan 4931
- *Pinus sylvestris*
  - branches
    - stand density
      - Europe 7146
      - Russia 7146
- remote sensing, fire danger, France 244
- *Salix viminalis,* plant water relations, seasonal variation, Sweden, simulation 3335
- tropical forests, transpiration, Brazil, estimation 8378

Evolution
- *Acacia,* seeds, amino acids, chemotaxonomy 9979
- *Betula,* defence mechanisms, *Lepus americanus,* USA 4915
- *Castanea sativa,* genetic variation, Europe 1437
- *Cryptomeria japonica,* chloroplast genetics 9037

Evolution *cont.*
- Fabaceae, Papilionoideae, embryology, taxonomy 8903
- flora, seeds, adaptation, New Zealand 3826
- gymnosperms, embryology 2940
- Ingeae, plant composition, amino acids, chemotaxonomy 8958
- Lauraceae, flowers, stamens 4837
- Laurales, flowers, stamens 4837
- *Metrosideros polymorpha,* stand characteristics, population dynamics, USA 3989
- natural selection, Myrtaceae, genetics, ploidy, reproductive behaviour 578
- *Pinus,* chloroplast genetics 9037
- *Pinus contorta,* genetic variation, isoenzymes, USA 9047
- *Populus,* defence mechanisms, *Lepus americanus,* USA 4915
- speciation, *Pinus,* geographical distribution 8132
- vessels, plant water relations 4621

Excoecaria, taxonomy, flora, South East Asia 7240

Excoecaria agallocha
- fisheries, Sri Lanka 9232
- mangrove forests
  - increment, diameter, natural regeneration, Bangladesh 6177
  - remote sensing, synecology, India 6996
- mangroves, foliage, pigments, seasonal variation, India 4675
- natural regeneration, crabs, Bangladesh 7257
- underplanting, mangroves, forest plantations, sustainability, Bangladesh 6108
- wood anatomy 401

Exocarpos aphyllum
- mistletoes
  - *Amyema preissii,* host parasite relationships, seed germination, seedling growth 5674
  - *Lysiana exocarpi,* host parasite relationships, seed germination, seedling growth 5674

Exoteleia dodecella
- insect pests
  - *Pinus,* Spain, biology, damage 8332
  - *Pinus sylvestris,* Poland, damage, assessment 4030

Exotics
- *Agathis robusta,* silviculture, India 9544
- forest trees
  - species trials, arboreta, New Zealand 2545
  - UK 5003
- invasion
  - broadleaved evergreen forests, nature conservation, Tanzania 1573
  - coniferous forests, degraded forests, USA 3870
- landscape, Italy, forest management, aesthetic value 9608
- *Pinus,* species trials, minor forest products, India, reviews 6870
- plant colonization, Puerto Rico 1336
- *Ravenala madagascariensis,* reproductive behaviour, Australia, plant colonization 1306
- reclamation, mined land, Venezuela 6711

Experimental design
- factorial analysis 9350
- forest nurseries, outplanting, trials 28
- forest trees, tree breeding 25
- growth chambers, forest trees, air pollution, reviews 5957
- *Pinus radiata,* thinning, statistical analysis, New Zealand 5015
- *Pinus sylvestris,* provenance trials, plant competition, increment, Sweden 9415
- provenance trials, progeny testing, artificial selection, Poland 2179
- research, statistics 8504
- tree breeding
  - breeding programmes, pollination, insects 3971
  - statistical analysis 794, 2447

Experimental plots
- history, Germany 5997
- methodology 7659
- selection criteria, forests, nature conservation, monitoring, Switzerland 10122

Expert systems
- forest fires, remote sensing 8512
- forest health 36
- forest management, decision making, geographical information systems 1622
- insect pests, *Lambdina fiscellaria*, control 5022
- urban forestry, choice of species, USA 2434
- woody plants, choice of species, fynbos, South Africa 9359
- woody weeds, invasion, fynbos, South Africa 9359

Extension
- agroforestry, development projects, India 4108
- community forestry
  - development, Nepal 7584
  - development projects, Tanzania 1571
- private forestry, USA 2537

Exudates, *Prosopis*, yeasts, Argentina 9065

Exudation (*see also* Resins)

Fabaceae
- bacteria, soil bacteria, tropical forests, Brazil 9071
- bark, medicinal plants, ethnobotany, India 4373
- Caesalpinioideae, fruits, seeds, phylogeny, taxonomy 8977
- China 7265
- direct sowing, species trials, agroforestry, Jamaica 2420
- flora
  - India 7251
  - taxonomy, Mexico, uses 1329
- flowers, development, plant morphology, phylogeny 8975
- India, reviews 7143
- medicinal plants
  - Africa 200
  - South America 200
- Mimosoideae, fruits, seeds, phylogeny, taxonomy 8977
- mycorrhizas, India, surveys 3152
- nitrogen fixation
  - conferences 8487
  - root nodules, Tropics, reviews 6320
- palaeobotany, Mexico 511
- Papilionoideae, embryology, taxonomy, evolution 8903
- plant anatomy
  - conferences 8488
  - phylogeny 8904
- plant morphology, conferences 8488
- root nodules
  - *Bradyrhizobium*, taxonomy, Brazil 9070
  - *Rhizobium*, taxonomy, Brazil 9070
  - surveys, Senegal 2236
- seeds, chemistry, galactomannans, taxonomy 7218
- Sophoreae, pollen, morphology, taxonomy 8902
- wood anatomy
  - phylogeny, keys 8906
  - taxonomy 8905

Fagaceae
- forest ecology, stand structure, vegetation types, China 3073
- rain forests, species diversity, forest litter, measurement, Sabah 2823

***Fagara*,** wood anatomy, wood properties 6428

Fagaropsis
- taxonomy
  - Africa 3045
  - Persian Gulf States 3045

Fagus
- decay fungi, *Phanerochaete velutina*, cycling, phosphorus, laboratory tests 8766
- deciduous forests, synecology, canopy, increment 3906

Fagus cont.
- mycorrhizas
  - plant nutrition, nitrogen 8273
  - woodlands, Netherlands 9084
- palaeoecology, plant succession, Greece 8989
- pollen, vegetation, simulation, USA 4805

Fagus crenata
- deer, *Cervus nippon*, natural regeneration, Japan, browsing damage 4054
- foliage, photosynthesis, Japan, measurement, techniques 3316
- forest influences, carbon dioxide, plant physiology, Japan 7025
- forest litter, cycling, Japan, seasonal variation 7894
- genetic variation, isoenzymes, Japan 2202
- insect pests
  - *Quadricalcarifera punctatella*
    - Japan 7454
      - predators, population dynamics 9159
- lignification, chemistry 3743
- monkeys, *Macaca fuscata*, seed production, Japan 689
- natural regeneration
  - canopy gaps, Japan, seed production, seed dispersal 6104
  - site preparation, Japan, *Sasa kurilensis*, control 4346
  - stand characteristics, Japan 8985
  - stand structure, aspect, Japan 9001
- photosynthesis, plant water relations, diurnal variation 3783
- seed production, seed quality, Japan, variation 7213
- seedlings
  - fungal diseases, *Colletotrichum dematium*, natural regeneration, Japan 4853
  - snow cover, natural regeneration, Japan, vertebrate pests 6252
- seeds
  - phenology, Japan, meteorological factors 9879
  - snow cover, natural regeneration, Japan, vertebrate pests 6252
- stand structure, Japan, climax communities, spatial distribution 8157
- stem form, snow, Japan, resistance 2954
- stemflow, pH, soil chemistry, acidification, Japan 1992
- stems, growth models 1820
- transpiration, stand characteristics, thinning, Japan 1927
- understorey, simulation, Japan 3117
- wood chemistry, lignin 6450

Fagus grandifolia
- biomass, equations, allometry, USA 4195
- deciduous forests
  - natural regeneration, seed banks, Canada 3119
  - soil chemistry, sulfur, USA 8775
- forest litter, soil fauna, USA 1924
- fungal diseases, *Nectria*, North America, epidemiology 7401
- gas exchange, carbon dioxide enrichment 2080
- genetic variation, isoenzymes, USA 8240
- insect pests, *Cryptococcus fagisuga*, North America, fungal diseases, *Nectria* 7401
- light, soil water, increment, USA 5181
- plant succession, Canada, simulation 4787
- plant water relations, dielectric properties 785
- roots, USA, growth 1229
- seedlings, plant competition, North America, growth 3058
- soil amendments, lime, seed banks, USA 6898
- soil chemistry, cation exchange capacity, Canada 5250
- wind damage, stand structure, USA, growth 277

***Fagus japonica*,** natural regeneration, stand structure, aspect, Japan 9001

***Fagus orientalis*,** natural regeneration, stand structure, Iran, logging effects 6916

Fagus sylvatica
- acid deposition
  - photosynthesis 1156
  - throughfall, stemflow, Italy, chemical composition 337
- afforestation, Germany, carbon cycle 8866
- air pollution
  - arsenic, Germany 8836
  - chlorine, indicator plants, Switzerland 2495
  - foliage
    - chemistry, Slovakia 9745
    - provenance, Italy, damage 5340
    - Switzerland 336
  - forest decline, Poland 2873
  - increment 1971
  - lead, plant composition, altitude, Germany 4567
  - ozone, drought, plant physiology 5325
  - plant water relations 1970, 7090
  - sulfates, Slovakia, seasonal variation 7087
  - Switzerland, municipal refuse disposal, chloride 6341
- artificial regeneration, protection forests, Germany 7552
- bark
  - anatomy
    - age of trees, image processing 6398
    - image processing 6399
  - plant composition, suberin 6461
- biomass, distribution, Austria 227
- buds
  - dormancy
    - growth models, Netherlands 2510
    - phenology, stand density, Slovakia 7145
  - shoots, France, biomass, development 4638
- canopy, reflectance, UK, seasonal variation 6224
- canopy gaps
  - soil biology
    - Germany 7937
    - microorganisms, Germany 7936
  - soil water balance, cycling, Germany 7950
- carbon cycle, Germany 323
- choice of species, protection forests, avalanches, Germany 6869
- climax communities, forest litter, decomposition, Spain 7915
- coppice
  - Italy, research 8616
  - silvicultural conversion
    - Croatia 4319
    - Italy, stand structure 8602
- coppice with standards, silvicultural conversion, Italy 6093
- crown
  - development, light, France 6387
  - increment, forest decline, Switzerland, simulation 8944
- deciduous forests, soil properties, simulation, Spain 8785
- deer, *Cervus elaphus*, France, ecology, stand characteristics 7538
- dendrochronology
  - autecology, Spain 1592
  - forest decline, France, growth rings, increment 4991
  - increment, France 3290
- dendroclimatology
  - increment, Slovakia 10158
  - Italy 2442
  - UK 7615
- ectomycorrhizas, *Lactarius*, France, morphology 5578
- enzyme activity, foliage 8933
- epiphytes, Spain, synecology 1388
- fertilizers
  - plant nutrition, plant composition, Sweden 8594
  - plant residues, soil chemistry, Germany 892
  - water quality, Germany 884

Fagus sylvatica *cont.*
- foliage
  - carbon dioxide enrichment, plant water relations 1882
  - chemistry, esters 1253
  - Germany, flavanols 433
  - leaching, precipitation 7089
  - optical properties 1255
  - stomata, density, carbon dioxide enrichment, Italy 2048
- forest decline
  - crown, Italy 3025
  - forest inventories, Switzerland 4721
  - forest management, France 3821
  - France 3816-3817
  - genetic variation, Europe 6583
  - Germany 6505
  - mountain forests, Croatia 4722
  - soil water, chemistry, salt injury, Denmark 1295
- forest health, UK, forest decline 6501
- forest influences
  - air, Germany, monoterpenes, diurnal variation 1186
  - atmosphere, Austria, volatile compounds 8015
  - soil chemistry, Belgium, site factors, classification 8999
- forest inventories, remote sensing, volume determination, Austria 6216
- forest litter
  - biomass, Austria 227
  - cycling, Sweden 2820
  - decomposition
    - chemical composition 295
    - Germany 1915
      - branches, roots 2825
      - temperature 7907
    - Poland, chemistry 7901
    - soil biology, Germany 7910
  - nutrients, soil properties, Denmark 7962
  - plant succession, fields, Germany 2825
  - soil chemistry, Collembola, Austria 4504
- forest nurseries, herbicides, UK, tolerance 2644
- forests
  - forest plantations, multiple land use, species diversity, Spain 8407
  - synecology
    - Spain 8158
      - statistical analysis 2142
- *Fraxinus excelsior,* natural regeneration, plant competition, plant water relations, Germany 9781
- fungal diseases
  - *Apiognomonia errabunda,* infection 5664
  - Basidiomycotina, temperature 4861
  - *Biscogniauxia nummularia,* water stress, Italy 9104
  - *Nectria,* North America, epidemiology 7401
- fungi, thinning, Slovakia 7383
- gas exchange, assimilation 4690
- genetic variation
  - Germany, isoenzymes 9987
  - isoenzymes
    - France 581
    - Italy 8250
  - reviews, Germany 6582
- genetics, natural selection 5552
- ground vegetation
  - Germany, heavy metals, uptake 8165
  - plant nutrition, acid deposition, Sweden 3755
  - plant succession, Poland 3943
  - soil chemistry
    - exchangeable cations, Sweden 7885
    - France 3090
  - Sweden, soil, acidification 8164
- group fellings, canopy gaps, plant succession, Germany 8607
- growth models, plant competition, France, light, water availability 4753
- height, diameter, France, equations 4405

Fagus sylvatica *cont.*
- humus, soil biology, Oligochaeta, France, variation 7877
- increment 1007
  - climate, Germany, simulation 1058
  - Germany 6982
  - height, growth models, Germany 6185
  - Switzerland, site factors 6967
- injuries, Switzerland 2093
- insect pests
  - Coleoptera, Germany 2355
  - *Cryptococcus fagisuga*
    - bark, proteins, Germany 1480
    - North America, fungal diseases, *Nectria* 7401
  - *Phyllaphis fagi*
    - plant nutrition
      - Belgium, forest nurseries 8328
      - Germany, defence mechanisms 5685
  - Romania, control 9188
  - *Schueziella fagicola,* galls 7494
- light, water stress, photosynthesis, plant morphology 1929
- logging, forest economics, France, profitability 9653
- microwave radiation, seedlings 329
- mixed forests
  - increment, recruitment, mortality, Poland 2163
  - silviculture, Germany 919
  - soil chemistry, seasonal variation, Austria 7886
  - understorey, quality, Poland 1816
- mixtures
  - mountain forests, Germany 948
  - stand establishment, cover crops, fertilizers, Germany 6923
  - stand structure, Germany 9581
- mycorrhizas, Belgium, seasonal variation 1445
- natural regeneration
  - Germany, silvicultural conversion 4322
  - *Larix decidua,* soil chemistry, Germany 8660
  - mortality, advance growth, drought, Spain 927
  - seed production, seed predation, UK 3031
  - seedbeds, site factors, light, Denmark 6920
  - site preparation, seed banks, Denmark 7773
  - statistical analysis, Germany, spatial distribution 7774
- natural selection, Germany, mathematics 2219
- nature reserves, Germany 5994
- nutrient deficiencies, magnesium, reviews 9732
- ozone
  - seedlings, Switzerland 5311
  - water stress, shoots, growth 3022
- phenology
  - climatic change, Europe 4618
  - Slovakia 7144
- photosynthesis
  - carbon dioxide enrichment, foliage, pH 2084
  - photosystem II, chlorophyll, fluorescence, measurement 8496
- plant competition
  - natural thinning, simulation 9362
  - nature reserves, Germany 9956
- plant composition, major elements, Austria 227
- plant morphology, habit, taxonomy, Poland 1322
- plant nutrition 2850
- plant physiology, remote sensing 1038
- plant succession
  - climatic change, Switzerland 8171
  - dunes, Netherlands 9952
  - synecology, Germany 9953
- plant water relations
  - cavitation
    - genetic variation, Italy 3607
    - Italy, seasonal variation 7069
- planting stock, UK 2635

Fagus sylvatica *cont.*
- pollarding, UK, growth, mortality 5151
- pollen analysis, vegetation, history, Austria 7261
- pollination, France, outcrossing 4730
- precipitation, air pollution, hydrology, UK 3670
- remote sensing, radar, Switzerland, temperature 1862
- reproductive behaviour, crown, forest decline, UK 3033
- rodents, *Apodemus flavicollis,* Spain 10060
- root systems, Germany, spatial distribution 4661
- roots
  - biomass, Slovakia 6964
  - dendrochronology, Germany 6760
  - methodology 9344
  - respiration, Germany 7185
- salt spray, soil toxicity, Denmark 8000
- sap, Germany, sulfur, distribution, seasonal variation 1134
- seed production, seed quality, stand age, Germany 2567
- seedling growth
  - root zone temperature 6275
  - survival, light, plant water relations 3545
- seedlings
  - light penetration, Italy, growth, morphology 6260
  - ozone, messenger RNA, induction 8185
  - waterlogging, water stress, photosynthesis, pot experimentation 4685
- seeds
  - storage 2566
    - seed moisture, drying, temperature 82
- selection system, Europe 912
- silvicultural conversion, mixtures, Austria 6940
- silvicultural systems 8604
  - selection system, stand characteristics, Germany 6132
- silviculture
  - Germany, conferences 5940
  - heartwood, formation, prevention, Poland 1180
- site class assessment, Slovenia 5175
- snow, evaporation, Germany 4933
- soil biology
  - microorganisms 7931
    - carbon cycle, nitrogen cycle, Germany 7933
  - Oligochaeta 7931
- soil chemistry, acidification, clay minerals, Sweden 291
- soil fungi
  - keratinophilic fungi, Slovakia 1922
  - Netherlands 3590
- soil organic matter, dissolved organic matter, Netherlands 1907
- soil pH, soil organic matter, Sweden 2816
- soil types, soil properties, Denmark 1085
- species trials, forest plantations, grazing, France 5884
- stand characteristics
  - Italy 8658
  - plant competition, yield tables, simulation 6832
- stand density
  - basal area, Romania, allometry 8662
  - Germany 2687
- stand development, climate, light, phenology, Italy 8665
- stand structure
  - increment, Croatia 4404
  - nature reserves, Slovenia 2682
- stem form, eccentricities, genetic variation, Europe 5519
- stress factors, forest health, Netherlands 1296
- synecology
  - botanical composition, Slovakia 7273
  - plant communities, statistical analysis, Germany 3327
  - site class assessment, Greece 1355

Fagus sylvatica *cont.*
- taxonomy, plant morphology, habit, Poland 2114
- thinning
  - Denmark 6936
  - Germany 9526
  - increment, Slovenia 5149
  - logging effects, Austria, simulation 227
  - pruning, Germany 9525
- tissue culture, micropropagation 5096
- transpiration
  - estimation, hydrology, UK 3605
  - microclimate, leaf conductance, equations, Germany 9719
- underplanting, coniferous forests, Poland 3461
- understorey, silviculture, Germany 9545
- vegetative propagation, shoot cuttings, plant growth regulators 6884
- vessels, cambium 2945
- viral diseases, Germany, transmission 2290
- volume, increment, bark, Spain, equations 5961
- volume determination, remote sensing 1034
- wildlife, birds, Slovakia 10078
- wind damage, Netherlands 1062
- wood anatomy
  - abnormal development, discoloration, injuries 1214
  - vessels, climate, Switzerland 8894
- wood chemistry
  - esters 1253
  - growth rings, Germany, nickel, seasonal variation 2976
  - heavy metals, air pollution, Germany, seasonal variation 6343
  - sugars 4668
- wood properties, wood anatomy, methodology, boring 2494

Faidherbia albida
- agroforestry
  - economics, Tanzania 3261
  - Tanzania 7576
- canopy, soil properties, Malawi 8430
- forest influences, soil fertility, Niger 1919
- forest nurseries
  - seedlings, increment, plant morphology, Burkina Faso 6061
  - shoot cuttings, increment, plant morphology, Burkina Faso 6061
- forest plantations, sand dune stabilization, Senegal 4939
- growth rings, wood anatomy, Africa, rain 396
- increment, variation, soil fertility, agroforestry, Niger 3275
- nitrogen fixation, estimation, isotope dilution, pot experimentation 9725
- pollination, insects, Senegal 3842
- root nodules, *Bradyrhizobium*, Senegal 8266
- seed germination, seed treatment, India 858
- seedling growth
  - symbiosis
    - *Bradyrhizobium japonicum*, nitrogen fixation 3151
    - *Rhizobium*, nitrogen fixation 3151
  - water stress, Nigeria 1946
- shelterbelts, species trials, soil properties, India 3689
- symbiosis
  - Africa, conferences, research 6807
  - *Bradyrhizobium*, Senegal, theses 5667
- vegetative propagation, layering, shoot cuttings, India 8586

Falcatifolium taxoides, parasitic plants, *Parasitaxus ustus*, New Caledonia, host parasite relationships, morphology 9128

Falco columbarius, birds, forest influences, UK 5825

Fallout
- caesium, forests, soil pollution, Spain 5307
- *Pinus sylvestris*, radionuclides, soil pollution, Germany, movement in soil 8830

Faramea cyanea, wood anatomy 6430

Farm forestry
- afforestation, agricultural land, Italy 10093
- *Ailanthus excelsa*, forest economics, agroforestry, India 9648
- Australia, books 4158
- *Betula*, natural regeneration, artificial regeneration, Sweden 6921
- choice of species, Bangladesh 6717
- community forestry, UK 4124
- *Cupressus*, tree breeding, wood properties, New Zealand 4830
- development projects, India 4120
- economics
  - *Acacia mearnsii*, Tanzania 3251
  - development projects, America 10098
  - incentives, Malawi 9260
- *Eucalyptus tereticornis*, India 1549
- farmers' attitudes, Finland 8411
- forest management
  - participation, India 3495
  - sustainability, economics, Costa Rica 5219
- India 4099-4100
- investment, economic analysis, USA, computer techniques 37
- land evaluation, Sweden, mathematical models 6243
- land use
  - East Africa, books 4166
  - East Asia, books 4166
- *Leucaena leucocephala*, biomass production, Nepal, equations 6966
- multipurpose trees
  - choice of species
    - Bangladesh 6716
    - direct sowing, Australia 10121
  - soil fertility, India 2902
- New Zealand 9259
- *Populus*, land use, agricultural land, Italy, economics 6245
- reclamation
  - saline soils, development projects, Australia 7566
  - soil types, agroforestry, Australia, wetlands 8410
  - waste land, agroforestry, fuel plantations, India 7558
- short rotation forestry, fuel plantations, UK, books 7623
- surveys
  - Asia, trees, products, utilization 1548
  - forest resources, Kenya 3250
- *Tectona grandis*, Lao 8409
- Thailand 7567
- woody plants, natural regeneration, artificial regeneration, Australia 7687

Farm woodlands
- birds, *Columba palumbus*, hedges, UK, control 1509
- community forestry, UK 4124

Felis concolor, wildlife, USA, habitats, fragmentation 6683

Felling, types of (*see* Silvicultural systems)

Fergusobia tumifaciens
- plant parasitic nematodes
  - *Eucalyptus deglupta*
    - Philippines
      - control 1476
      - damage 1476

Fergusonina tillyardi, insect pests, *Eucalyptus deglupta*, Philippines, damage, control 1476

Fernandoa, taxonomy, Africa 8965

Ferns, landslides, forest trees, plant succession, plant competition, Puerto Rico 3872

Fertigation, *Cupressus arizonica*, plant nutrition, nurseries, hydroponics 10153

Fertilization (in reproduction) (*see* Pollination, fertilization)

Fertilizers
- *Abies alba*, forest decline, France, plant nutrition, soil fertility 890
- *Acer saccharum*
  - forest litter, decomposition, Canada 885
  - soil chemistry, cycling, Canada 888
- afforestation, water conservation, gels, Yemen 153

Fertilizers *cont.*
- *Albizia procera*, reclamation, mine spoil, India 9250
- *Alnus rubra*, reproductive behaviour, irrigation, spacing, USA 9869
- ammonium sulfate, *Picea abies*, cycling, Sweden 2614
- animal manures, *Eucalyptus tereticornis*, seedling growth, water stress, pot experimentation 1712
- apatite, *Fagus sylvatica*, plant nutrition, plant composition, Sweden 8594
- ash, *Betula pendula*, seedling growth, Finland 898
- biofertilizers
  - microorganisms
    - Australia 5591
    - reviews 5591
  - nitrogen fixing trees, seedling growth, Puerto Rico 1713
  - *Rhizobium*, *Acacia nilotica*, forest nurseries, India 142
- boric acid, mycorrhizas, *Pisolithus tinctorius*, *Pinus echinata*, plant composition 4015
- calcium ammonium nitrate, *Pinus sylvestris*, foliage, ultrastructure, Finland 7079
- calcium fertilizers
  - dosage, soil chemistry, equations 891
  - multipurpose trees, ultisols, seed size, pot experimentation 7758
  - *Picea abies*, soil biology, microorganisms, Finland 5109
- canes and rattans, *Daemonorops melanochaetes*, forest nurseries, Indonesia 1803
- conifers
  - foliage, colour, forest decline, France 2610
  - forest plantations, soil types, Russia 5108
  - humus, mineralization, Canada 6289
  - irrigation, acid deposition, Europe 3632
  - nitrogen cycle, water stress, methodology 7646
  - plant nutrition, soil fertility, Canada 7793
- *Eucalyptus*, increment, Australia, insect pests 9138
- *Eucalyptus globulus*
  - roots
    - development, irrigation, Portugal 8048
    - irrigation, soil properties, Portugal 8767
- *Eucalyptus nitens*, nutrient deficiencies, copper, Australia 1717
- *Eucalyptus pauciflora*, soil biology, microorganisms, Australia 7927
- *Fagus sylvatica*
  - natural regeneration, seedbeds, light, Denmark 6920
  - plant residues, soil chemistry, Germany 892
  - water quality, Germany 884
- fly ash, Germany 9467
- forest trees
  - mixtures, stand establishment, cover crops, Germany 6923
  - mulching, seedling growth, Canada 6116
  - plant nutrition, soil chemistry, logging, conferences 770
- forestry, Netherlands, reviews 889
- fungal diseases, *Cronartium fusiforme*, *Pinus elliottii*, USA 4024
- gypsum, forest trees, cycling, France 8779
- irrigation, forest trees, soil chemistry, Poland 137
- lime
  - *Abies alba*, mycorrhizas, soil chemistry, Romania 1715
  - *Acer saccharum*, deciduous forests, cycling, Canada 886
  - boron fertilizers
    - *Picea abies*
      - mycorrhizas, Finland 3161

- **Fertilizers** *cont.*
  - lime *cont.*
    - boron fertilizers *cont.*
      - *Picea abies cont.*
        - plant nutrition, humus, Finland 2616
    - carbon dioxide enrichment, Germany 9766
    - *Fagus sylvatica,* plant nutrition, plant composition, Sweden 8594
    - forest trees
      - cycling, France 8779
      - ground vegetation, Germany 8591
    - multipurpose trees, acid soils, agroforestry, Indonesia 4113
    - *Picea abies*
      - irrigation, mycorrhizas, enzymes 9993
      - mycorrhizas, *Cenococcum geophilum,* acid soils, Finland 3162
      - nutrient deficiencies, magnesium, acid soils, France 2856
      - Oligochaeta, acid deposition, humus 1105
      - seedlings, mycorrhizas, Sweden 6616
    - *Quercus coccinea,* dendrochronology, wood chemistry, USA 1590
  - liming, *Picea rubens,* increment, height, USA 3879
  - liquid fertilizers
    - *Eucalyptus deglupta,* seed germination, Indonesia 859
    - *Peronema canescens,* shoot cuttings, Indonesia 1687
  - magnesium fertilizers
    - *Picea abies*
      - cycling, Germany 7761
      - nutrient deficiencies
        - foliage, Germany 132
        - soil chemistry, Germany 132
  - *Metrosideros polymorpha,* nutrient deficiencies, phosphorus, USA 9461
  - multipurpose trees, afforestation, site preparation, Indonesia 7781
  - mycorrhizas, *Laccaria proxima, Picea sitchensis,* forest nurseries, UK 906
  - nitrogen, *Pinus sylvestris,* nitrogen cycle, isotope fractionation, Sweden, methodology 2490
  - nitrogen fertilizers
    - *Acacia,* nutrient allocation, Côte d'Ivoire 3408
    - *Albizia procera,* forest nurseries, plant growth regulators, India 9474
    - *Alnus,* foliage, labelling 8081
    - *Betula pendula,* light, Finland, browsing damage 3221
    - boreal forests, ground vegetation, humus, Finland 5456
    - *Celtis australis,* seed weight, seedling growth, India 141
    - coniferous forests
      - streams
        - Sweden
          - aquatic animals 9458
          - water quality 9458
    - conifers
      - peat soils
        - Canada
          - distribution 3411
          - uptake 3410
      - plant composition, seasonal variation 1281
      - understorey, Sweden 2611
    - *Eucalyptus globulus,* plant nutrition 901
    - Fabaceae, root nodules, seedling growth 5288
    - *Ginkgo biloba,* plant nutrition, USA 1709
    - *Gmelina arborea,* seedling growth, wood properties 127
    - *Liquidambar styraciflua*
      - cycling, foliage, USA 8823
      - genetic variation, USA 9464
    - mineralization, *Pinus ponderosa,* seedling growth, pot experimentation 7662

- **Fertilizers** *cont.*
  - nitrogen fertilizers *cont.*
    - *Morus nigra,* foliage, biomass production, India 7801
    - mycorrhizas, *Cenococcum geophilum, Pinus sylvestris,* seedlings 7392
    - *Picea abies*
      - advance growth, clear felling, Russia 4294
      - mycorrhizas, soil water regimes, Sweden 8260
      - water stress, nutrient uptake, photosynthesis 7945
    - *Picea glauca*
      - forest nurseries, nutrient deficiencies, phosphorus 5111
      - weed control, irrigation, Canada 4337
    - *Picea sitchensis,* UK, *Elatobium abietinum* 2612
    - *Pinus contorta,* plant nutrition, increment, Canada 9462
    - *Pinus densiflora,* plant nutrition, nitrogen, plant water relations 2852
    - *Pinus ponderosa,* carbon dioxide enrichment, carbon cycle 5302
    - *Pinus radiata*
      - agroforestry
        - plant competition, New Zealand 1568-1569
        - plant nutrition, New Zealand 1568-1569
      - genetic variation, plant physiology, Australia 7752
      - thinning, Australia 1708
    - *Pinus resinosa,* plant nutrition, hardening, plant water relations 4305
    - *Pinus sylvestris*
      - Carabidae, Poland 7416
      - nitrogen cycle, Sweden 4295
      - nutrient uptake, Russia 3409
      - thinning, forest economics, Russia 9517
    - *Prunus,* irrigation, forest nurseries, UK 4311
    - *Pseudotsuga menziesii*
      - forest decline, Netherlands, mycorrhizas 4296
      - increment, soil chemistry, USA 3418
      - USA, growth 128
    - *Quercus ilex,* irrigation, Spain, interactions 3415
    - *Salix viminalis,* foliage, plant water relations, growth 3803
  - nitrogen-phosphorus fertilizers
    - *Acacia nilotica,* seedling growth, mycorrhizas, root nodules 7385
    - *Ailanthus excelsa*
      - forest plantations, sandy soils, India 131
      - increment, nutrient uptake, India 9468
    - *Cassia siamea,* planting, soil degradation, India 8627
    - *Eucalyptus nitens,* site preparation, weed control, Australia 3463
    - *Eucalyptus tereticornis,* seedling growth, water stress, pot experimentation 1712
    - *Gmelina arborea*
      - seedling growth, wood density, latosols 134
      - seedlings, wood properties, latosols 135
    - *Picea abies,* soil biology, microorganisms, Finland 5109
    - *Pinus pinaster,* agroforestry, spacing, Greece 8428
    - *Pinus roxburghii*
      - eroded soils, mulching, India 130
      - soil properties, India 882
  - NPK fertilizers
    - *Castanea sativa,* carbon dioxide enrichment, gas exchange, interactions 2069
    - *Casuarina equisetifolia,* planting stock, seedlings, India 1721

- **Fertilizers** *cont.*
  - NPK fertilizers *cont.*
    - *Duabanga moluccana,* seedling growth, shading, Indonesia 6070
    - *Eucalyptus grandis,* afforestation, grasslands, India 3421
    - *Eucalyptus tereticornis,* seedling growth, pot experimentation 3417
    - forest trees, root systems, development, density 3407
    - *Juglans nigra,* multipurpose trees, tree breeding, USA 9055
    - *Picea abies*
      - increment, Denmark 7755
      - irrigation, increment, Denmark 911
    - *Picea mariana*
      - increment, spacing, Canada 1714
      - plant nutrition, spacing, Canada 1714
    - *Pinus contorta,* irrigation, increment, Denmark 911
    - *Pinus radiata,* nutrient deficiencies, soil types, South Africa 7073
    - *Pinus sylvestris*
      - forest nurseries, nutrient uptake, nitrogen 4306
      - plant nutrition, Russia 7757
      - stand density, stem form, Belarus 5156
    - *Salix*
      - biomass, plant nutrition, Finland 7756
      - biomass production, Finland 5106
    - *Santalum album,* planting stock, stumps, India 1721
    - *Shorea,* seedling growth, mortality, Indonesia 1710
    - *Tectona grandis,* planting stock, seedlings, India 1721
  - nutrition physiology, *Acer saccharum,* nutrient deficiencies, potassium, Canada 2615
  - oilseed cakes, *Terminalia bellirica,* increment 6896
  - organic compounds (*see also* Composts)
  - paper mill sludge
    - *Betula pendula,* seedling growth, Finland 898
    - wildlife, coniferous forests, USA 4069
  - phosphorus fertilizers
    - *Cassia,* plant nutrition, nitrogen, Nigeria 9724
    - *Eucalyptus,* mineralization, Australia 5110
    - *Gliricidia sepium,* plant nutrition, nitrogen, Nigeria 9724
    - *Morus alba*
      - foliage
        - mycorrhizas, India 7802
        - silkworms, India 7802
    - multipurpose trees, ultisols, seed size, pot experimentation 7758
    - *Paraserianthes falcataria,* forest nurseries, growing media, Indonesia 903
    - *Pinus,* forest plantations, soil types, South Africa 126
    - *Pinus elliottii,* forest litter, South Africa 9466
    - *Pinus radiata*
      - stem form, volume, Australia 5105
      - thinning, Australia 1708
    - *Quercus ilex,* irrigation, Spain, interactions 3415
    - root nodules, *Frankia, Casuarina cunninghamiana,* seedling growth 6904
    - sulfur fertilizers, *Leucaena leucocephala,* seedling growth 4298
    - *Tectona grandis,* forest plantations, increment, Venezuela 4307
  - *Picea abies*
    - forest decline
      - France, growth 4303
      - soil chemistry, plant nutrition, France 4302

Fertilizers *cont.*
- *Picea abies cont.*
  - forest economics, Austria 9465
  - forest litter
    - decomposition, chemistry, Sweden 3580
    - ground vegetation, Austria 4304
  - ground vegetation, forest decline, Germany 9463
  - irrigation, plant nutrition, Sweden 4538
  - nitrogen cycle, Finland 7953
  - nutrient balance, irrigation, Sweden 7966
  - protection forests, forest decline, Switzerland 7753
  - root systems
    - drought, Sweden 8047
    - soil chemistry, rhizosphere, Sweden 7749
  - roots
    - nutrient uptake, Sweden 9788
    - vigour, Sweden 7750
  - soil biology
    - Austria 136
    - Finland 5276
  - soil organic matter, decomposition, soil water, Denmark 3581
  - wood anatomy, lignification 5345
- *Picea glauca*
  - foliage
    - chemistry, Canada 887
    - weight, Canada 887
  - forest nurseries, Canada, interactions 2619
  - weed control, Canada 1749
- *Picea sitchensis,* wind damage, UK 3564
- *Pinus,* foliage, cycling, USA 2859
- *Pinus contorta,* plant nutrition, nitrogen cycle, Canada 325
- *Pinus elliottii*
  - photosynthesis, USA, seasonal variation 4695
  - soil chemistry, USA, persistence 2618
- *Pinus patula,* forest plantations, mycorrhizas, South Africa 4846
- *Pinus pinaster,* site preparation, site factors, Greece 7780
- *Pinus sylvestris*
  - afforestation, peatlands, climate, Sweden 6112
  - amelioration of forest sites, Germany 8592
  - clear felling, soil chemistry, denitrification, Sweden 1095
  - Finland, nutrients, availability 7762
  - foliage, chemistry, Finland 4297
  - increment, plant composition, peatlands, Finland 6068
  - seed orchards, flowering, seed production, Finland 5063
  - thinning, wind damage, snow damage, Sweden 3560
  - understorey, roots, Norway 7751
- *Pinus taeda*
  - crown, thinning, USA 2011
  - foliage, thinning, USA 2011
- plant products, *Lannea coromandelica,* increment, pot experimentation 133
- potassium fertilizers
  - *Gmelina arborea,* seedling growth, wood properties 127
  - *Pinus sylvestris,* increment, plant nutrition, Finland 129
- potassium sulfate, *Acer saccharum,* deciduous forests, cycling, Canada 886
- poultry manure, *Pinus taeda,* water quality 7765
- *Pseudotsuga menziesii,* cycling, irrigation, Netherlands 7963
- *Quercus ilex,* foliage, irrigation, Spain, plant composition 3752
- *Quercus petraea,* water quality, Germany 884
- *Quercus rubra,* nutrient deficiencies, air pollution, nitrogen, cycling, Netherlands 2617
- refuse, mycorrhizas, *Pinus halepensis,* Spain 4002

Fertilizers *cont.*
- requirements
  - *Casuarina equisetifolia,* nutrient deficiencies 3628
  - forest nurseries, Canada, assessment 908
- seaweed extract, *Pinus pinea,* roots, development, growth 1716
- seaweed products, *Eucalyptus,* forest nurseries, South Africa 9476
- sewage
  - broadleaves, forest nurseries, India 6905
  - *Eucalyptus,* Australia 6069
  - forest trees
    - increment, Algeria 900
    - soil chemistry, USA 896
  - industrial wastes, forest plantations, Poland 899
  - *Picea sitchensis*
    - groundwater, quality, UK 895
    - plant nutrition, UK 895
  - *Pinus thunbergii,* nitrogen cycle, runoff, Japan 3413
  - *Pseudotsuga menziesii,* soil chemistry, USA 894
- sewage sludge
  - *Abies grandis,* nutrient deficiencies, USA 3406
  - heavy metals, *Salix,* biomass production, Canada 9459
  - legislation 8593
  - *Populus grandidentata,* USA, ecology 3416
  - *Pseudotsuga menziesii,* nutrient deficiencies, USA 3406
- sodium humate, forest trees, seedling growth 8589
- soil chemistry, nitrogen leaching, Austria 7759
- split dressings, *Pinus,* USA 9457
- sprays, formulations 5107
- sulfur fertilizers
  - nitrogen fertilizers, *Pinus contorta,* foliage, Canada 897
  - *Pinus sylvestris,* Carabidae, Poland 7416
- tree injection, *Picea sitchensis,* UK 2613
- urea
  - *Pinus sylvestris,* increment, thinning, Sweden 3487
  - *Pseudotsuga menziesii,* soil fertility, USA, DRIS 8794
- urea fertilizers
  - fungal diseases, *Phellinus weirii, Pseudotsuga menziesii,* USA 4299
  - *Pinus radiata,* New Zealand 1135
  - *Pseudotsuga menziesii,* snow, Canada, application methods 4301
- water quality, simulation, USA, sewage sludge 3420

Fibres, *Fraxinus mandshurica,* wood anatomy, cell walls, reaction wood 6412

Ficus
- agroforestry, lac, China 978
- genetic resources, taxonomy, Indonesia 8981
- natural regeneration, forest fires 6524
- squirrels, *Ratufa indica,* India, food plants 1514
- wood anatomy, hydraulic conductivity, life form, Panama 5373

Ficus benghalensis, shoot cuttings, India 1689

Ficus benjamina
- foliage, buffering capacity, acid rain 3691
- shoot cuttings, Indonesia 6051

Ficus capensis, browse plants, insect pests, Nigeria 8325

Ficus carica
- multipurpose trees, Pakistan, plant composition, utilization 8908
- seed germination, ecology 3375

Ficus chrysolepis, Chiroptera, Pteropodidae, seed dispersal, Philippines 686

Ficus cunia, agroforestry, biomass production, cycling, India 8432

Ficus fistulosa, pollinators, Indonesia 3037

Ficus fulva, pollinators, Indonesia 3037

Ficus glaberrima, vegetative propagation, indigenous knowledge, Nepal 6883

Ficus glomerata, street trees, air pollution, dust, damage, Pakistan 4550

Ficus hispida
- pollination, beneficial insects, coevolution, India 8956
- pollinators, Indonesia 3037

Ficus infectoria, shoot cuttings, India 1689

Ficus insipida, foliage, anatomy, light intensity, photosynthesis 3731

Ficus lacor, vegetative propagation, indigenous knowledge, Nepal 6883

Ficus luschnathiana
- seed dispersal
  - seed germination
    - bats, Brazil 9881
    - birds, Brazil 9881

Ficus maclellandi, sap flow, Panama, equipment 6298

Ficus microcarpa, Indonesia, wood chemistry 2059

Ficus mysorensis, shoot cuttings, India 1689

Ficus natalensis, agroforestry, indigenous knowledge, Uganda, theses 9282

Ficus palmata, street trees, air pollution, dust, damage, Pakistan 4550

Ficus pertusa, phenology, Venezuela, developmental stages 9779

Ficus religiosa
- foliage, fodder, India, plant composition, nutritive value 8676
- shoot cuttings, India 1689
- street trees, air pollution, dust, damage, Pakistan 4550

Ficus roxburghii, fodder, choice of species, Nepal 6948

Ficus semicordata
- biomass production, Nepal, equations 6965
- fodder, choice of species, Nepal 6948

Ficus septica, pollinators, Indonesia 3037

Ficus subincisa, fodder, production, management, Nepal 6947

Ficus sycomorus
- insects, *Ceratosolen galili,* Southern Africa, ecology 620
- wood anatomy, rays, cell differentiation 2957

Ficus trigonata, phenology, Venezuela, developmental stages 9779

Ficus yoponensis, rain forests, agroforestry, synecology, cattle, Mexico 6736

Fiji
- *Santalum* 4168
- silvicultural systems, selective felling, forest ownership 8601

Finland
- air pollution, damage, forest economics 2779
- *Alnus incana,* taxonomy, new taxa 498
- *Betula*
  - bark, lichens, air pollution, chemistry 7996
  - hybrids, insect pests 7427
  - improvement fellings, mechanization, economics 5161
  - light, biomass, plant morphology 9667
  - pollen, allergens 1650
- *Betula alba,* foliage, air pollution, heavy metals, insect pests 4886
- *Betula pendula*
  - fertilizers
    - ash, seedling growth 898
    - paper mill sludge, seedling growth 898
  - foliage, anatomy, air pollution, ozone 6336
  - forest litter, soil biology, soil chemistry, heavy metals 7934
  - light, nitrogen fertilizers, browsing damage 3221
  - nitrogen cycle, air pollution, ozone 7096
  - planting stock, micropropagation, seedlings, increment 7766
  - pollen, allergens, house dust 7711
  - spacing
    - increment 9532
    - wood properties 9531

Finland *cont.*
  Betula pendula cont.
    taxonomy, new taxa 498
    tree breeding, progeny testing, phenology, growth rate 9980
    weed control, seedling growth 3450
  Betula pubescens, air pollution, foliage, defoliation, TCA 1165
  Betula tortuosa
    buds, sexual reproduction 4731
    foliage
      morphology, variation 2933
      plant composition, variation 2933
      plant water relations, variation 2933
  biomass production, nutrient reserves, carbon, nitrogen 7968
  birds
    Certhia familiaris, boreal forests, fragmentation, ecology 1522
    Tetrao urogallus, boreal forests 4061
    vegetation types, forest ecology 4918
  boreal forests
    climatic change, forest ecology, simulation 1621
    forest ecology, climate 8140
    nitrogen fertilizers, ground vegetation, humus 5456
    remote sensing 7007
      insect pests, spatial distribution 7839
    thinning, conferences 6810
  carbon cycle, forest products 5026
  coniferous forests
    air pollution
      heavy metals, indicator plants 3672
      soil pH 3570
    soil biology, soil organic matter 7939
  conifers
    acid deposition, plant nutrition, growth 7098
    advance growth, growth models, height 6971
    buds, phenology, climatic change, provenance trials 2009
    increment, diameter 9584
    pollen, development, forecasting, heat sums 9872
  deer, *Alces alces, Pinus sylvestris,* browsing damage 7519
  farm forestry, farmers' attitudes 8411
  fertilizers, sewage sludge, legislation 8593
  forest decline, air pollution, international cooperation 6859-6860
  forest fragmentation, species diversity, models 8154
  forest influences, watersheds, hydrology 5836
  forest inventories
    forest resources 5027
    sampling, errors, estimation, models 9353
    stand characteristics, simulation, statistical analysis 5198
  forest management
    decision making
      forest economics, simulation 7829
      participation 4430
    planning, biodiversity, conservation 2722
  forest nurseries, growing media, peat, properties 6081
  forest plantations, damage, ditches, maintenance, forestry machinery 3448
  forest policy, forestry development, rural development 5029
  forest trees
    acid deposition, watersheds, hydrology, acidification 6333
    air pollution, field experimentation, growth chambers 5955
    forest fires, mortality 8032
    growing stock, stand characteristics 4396
    lichens, air pollution, aluminium 8843
    natural thinning, mathematical models 9959
  forestry 5971
    carbon balance, projections 9376

Finland *cont.*
  forestry workers, safety, health 3359
  forests, soil density 5238
  fungal diseases
    conifers, forest nurseries 5619
    Endocronartium pini
      Pinus sylvestris 4022
        disease vectors, insect pests 5752-5753
    Gremmeniella abietina
      Pinus sylvestris 5639-5640, 10010
        air pollution, damage 9118
        insect pests, pest resistance 660
        stand density 1461
    Lophodermella sulcigena, Pinus sylvestris, detection 7663
    Melampsoridium betulinum, Betula tortuosa, acid deposition, heavy metals 5652
    Rhizoctonia, conifers, forest nurseries 5620
  insect pests
    Dineura viridiдorsata, Betula tortuosa, biology 2361
    Diprionidae, *Pinus sylvestris,* foliage, monoterpenes 2367
    Eriocrania, Betula alba, air pollution 4886
    Hylobius abietis
      Pinus sylvestris
        forest plantations
          models 10043
          survival 10043
    Pissodes piniphilus, Pinus sylvestris, disease vectors, *Endocronartium pini* 5752-5753
    Tomicus piniperda, Pinus sylvestris, fungal diseases, damage 660
  insects, Lepidoptera, broadleaves, food plants 2299
  Larix, hybrids, seed orchards 3976
  Lepus timidus, Betula pendula, browsing damage, resistance 3221
  Microtus agrestis, Betula pendula, browsing damage, resistance 3221
  Picea abies
    calcium fertilizers, soil biology, microorganisms 5109
    fertilizers
      lime
        boron fertilizers
          mycorrhizas 3161
          plant nutrition, humus 2616
        mycorrhizas, *Cenococcum geophilum,* acid soils 3162
      soil biology 5276
    foliage
      damage, air pollution, deposition 9746
      pesticide residues 6455
    forestry practices, soil biology 5273
    global warming, provenance trials, increment 2791
    mixtures, increment, simulation 3462
    nitrogen cycle, fertilizers 7953
    nitrogen-phosphorus fertilizers, soil biology, microorganisms 5109
    shoot cuttings, increment, habit 866
    stand development, forest management, sustainability, simulation 9577
    tree breeding, progeny testing, genetic variation, heritability 9972
  Pinus
    air pollution, chlorinated hydrocarbons, foliage, chemistry 7989-7990
    bark, lichens, air pollution, chemistry 7996
  Pinus sylvestris
    acid deposition, foliage, growth, morphology 3647
    air pollution
      climate, measurement 5324
      foliage, forest decline 7092
      sulfur dioxide, gas exchange, simulation 6351

Finland *cont.*
  Pinus sylvestris cont.
    biomass production, climate, simulation 3488
    boreal forests, soil properties, mineralogy 9685
    canopy
      light
        natural regeneration
          seedling growth 9664
          simulation 9664
      radionuclides, fallout, caesium 1955
    climatic change
      carbon dioxide enrichment, photosynthesis 7861
      frost resistance, simulation 5231
    crown, thinning, simulation 8649
    cycling, biomass production 7960
    defoliation
      branches, foliage, increment 8892
      shoots, growth 2959
    drainage, growth models 5182
    fertilizers
      calcium ammonium nitrate, foliage, ultrastructure 7079
      foliage, chemistry 4297
      increment, plant composition, peatlands 6068
      nutrients, availability 7762
    foliage
      air pollution, pulp and paper industry 5314
      chemistry, polyamines 6452
      endophytes, acid deposition 2226
      major elements 5396
      shoots, light 2035
    forest health, air pollution, monitoring 9858
    forest nurseries, container grown plants, growing media, irrigation 3422
    global warming, provenance trials, increment 2791
    growing stock, stand structure, volume, increment 4397
    light, variation, measurement 8867
    mixtures, increment, simulation 3462
    natural regeneration, damage, deer, fungal diseases 10061
    peatlands, soil chemistry, drainage 3571, 9509
    photosynthesis
      air pollution, damage, methodology 1259
      plant nutrition, nitrogen, seasonal variation 8098
    plant nutrition, crown, foliage, age 3622
    planting stock
      bare rooted stock
        grading
          morphology 9471
          variation 9471
        morphology, quality 902
    plus trees, crown, tree breeding, phenotypic selection 7345
    pollen
      seasonal variation 2112
      viability, seasonal variation 9874
    potassium fertilizers, increment, plant nutrition 129
    progeny testing, sampling 7674
    provenance trials
      insect pests
        resistance
          Gilpinia pallida 10049
          Neodiprion sertifer 10049
    pruning, increment, diameter, simulation 3455
    regeneration surveys 7777
    remote sensing
      radar, biomass 3517
      reflectance, variation 7845
    roots, dynamics, cycling, peatlands 407
    salt injury, roadside plantations, foliage, chemistry 348
    sapwood, foliage, plant water relations, climate 5284

- **Finland** *cont.*
  - *Pinus sylvestris cont.*
    - seed orchards
      - fertilizers, flowering, seed production 5063
      - latitude 7731
    - seeds, imbibition, seed morphology, provenance 6400
    - site class assessment 6969
      - understorey, botanical composition 9590
    - soil biology, carbon dioxide enrichment 7935
    - soil water, chemistry 7879
    - spacing, increment, stem form 6937
    - stand characteristics, ground vegetation, roots, biomass production 7152
    - tree breeding, progeny testing, heritability 9973
    - volume determination, equations, forest inventories 7814
    - weed control 7785
    - wind damage, simulation 6822
    - wind resistance, bending 7033
  - *Populus tremula,* dead trees, insects, endangered species 4027
  - private forestry
    - amenity value of forests, landscape, methodology 10136
    - forest economics 5215
  - *Quercus robur,* genetic variation, isoenzymes 8233
  - rodents, *Microtus agrestis, Betula pendula,* fodder 6678
  - *Salix*
    - biomass production, plant nutrition 5184
    - geographical distribution 2136
    - NPK fertilizers
      - biomass, plant nutrition 7756
      - biomass production 5106
    - tree breeding, short rotation forestry, biomass production 5522
  - site preparation, soil temperature 7779
  - snow damage 5232
  - *Vaccinium,* habit, canopy 8039
  - *Vaccinium myrtillus,* browsing damage, biomass production 966
  - vegetation, history, pollen analysis, plant succession, palaeobotany 3063
  - wetlands, drainage, soil air 7783
- **Firebreaks**
  - forest trees, species trials, Indonesia 2000
  - *Quercus,* agroforestry, Italy 3273
- **Fires** (*see also* Controlled burning; Forest fires)
- **Fish farming** (*see* Aquaculture)
- **Fisheries,** mangroves, Sri Lanka 9232
- **Fishes**
  - bottomland forests, Brazil 9233
  - *Oncorhynchus clarki,* grazing, livestock farming, freshwater ecology, USA 8357
  - species diversity, swamps, conservation, South East Asia 10080
  - water quality, conifers, forest ecology, USA 2170
- ***Fitzroya cupressoides***
  - deforestation, nature conservation, Chile 3253
  - silviculture, Chile 2660
- ***Flacourtia ramontchii,*** wood anatomy, rays 2029
- ***Flemingia macrophylla***
  - agroforestry, Brazil 2422
  - fodder, biomass production, contour cultivation, Sri Lanka 1799
  - green manures, *Swietenia macrophylla,* seedling growth, Indonesia 1711
  - increment, acid soils, lime, agroforestry, Indonesia 4113
  - ultisols, fertilizers, seed size, pot experimentation 7758
- ***Flindersia bourjotiana,*** afforestation, mixtures, degraded land, reclamation, Australia 3233
- ***Flindersia brayleyana***
  - afforestation, mixtures, degraded land, reclamation, Australia 3233
- ***Flindersia brayleyana*** *cont.*
  - rain forests, seeds, survival, predation, Australia 4050
- ***Flindersia pimenteliana,*** afforestation, mixtures, degraded land, reclamation, Australia 3233
- **Flooding**
  - *Alnus japonica,* seedlings, growth effects 6361
  - bottomland forests, forest decline, Greece 9236
  - broadleaves, plant nutrition, riparian forests, France 3640
  - effects, *Erythrina variegata,* seedlings, photosynthesis, nitrate reductase 6305
  - *Eucalyptus camaldulensis,* water uptake, Australia 2837
  - forestry, hydrology, clear felling, drainage, Sweden 4932
  - hypoxia
    - *Taxodium distichum*
      - photosynthesis, plant composition 3606
      - roots
        - gas exchange 1120
        - increment 1120
  - mangrove forests, soil chemistry, USA 3937
  - riparian forests, plant succession, Peru, geographical distribution 5467
  - sea water, *Pinus taeda,* soil chemistry, USA 1069
  - sediment yield, *Sequoia sempervirens,* New Zealand, tolerance 4525
  - *Taxodium distichum*
    - roots, shoots, biomass production 312
    - salt tolerance, USA, genetic variation 5402
  - tropical forests, synecology, Brazil 1367
- **Flooding tolerance**
  - *Astrocaryum jauari,* plant physiology, Brazil 1113
  - *Betula,* rootstocks, plant physiology 2589
  - broadleaves, seedlings, salt tolerance 6293
  - *Mora,* drought resistance, plant water relations, Guyana 9716
- **Floodplains**
  - *Fraxinus nigra,* reproductive behaviour, Canada 3834
  - logging, water quality, USA 2891
- **Floods**
  - forest trees, bottomland forests, canopy gaps, New Zealand 3964
  - *Fraxinus pennsylvanica,* erosion, stand structure, Canada 3111
  - protection forests, France, surveys 10089
- **Flora**
  - Anacardiaceae, Thailand 3862
  - Asteraceae, Peru 7247
  - Australia 12, 3296, 7242
  - biodiversity, nature conservation, India 7601
  - biosystematics, Cameroon 5427
  - boreal forests, Russia 5437
  - checklists
    - *Ilex,* Sabah 7248
    - *Jasminum,* South East Asia 7249
    - Seychelles, books 757
    - Somalia, books 758
  - Djibouti, books 1598-1600
  - domestication, forest trees, history, New Zealand 2131
  - *Drypetes standleyi,* Venezuela 1326
  - endangered species, national parks, conservation, planning, Canary Islands 8440
  - Ethiopia 1596
  - *Excoecaria,* taxonomy, South East Asia 7240
  - Fabaceae
    - India 7251
    - taxonomy, Mexico, uses 1329
  - forest trees
    - lowland areas, Indonesia, books 4163
    - rain forests, Australia, books 4996
  - Greece 1328
  - India 5439, 8982
  - Italy, urban areas 5438
  - Meliaceae, Brazil 7245
- **Flora** *cont.*
  - Mexico 7244, 7246
  - *Mitragyna rotundifolia,* India 7253
  - nature reserves, Brazil 9907
  - North America, books 5928
  - Oman 7252
  - *Premna wightiana,* geographical distribution, Sri Lanka 6522
  - Puerto Rico 3049
  - Rubiaceae, India 7250
  - São Tomé and Príncipe 9910
  - seeds, adaptation, evolution, New Zealand 3826
  - Singapore 3051
  - species diversity, conservation, Spain 8138
  - Taiwan 5435
  - taxonomy, North America 5929
  - *Uncaria,* India 7253
  - utilization, cerrado, land use, Brazil 2147
  - vegetation, Cape Verde, maps 9908-9909
  - vegetation types
    - Germany 9003
    - New Caledonia, surveys 8983
    - Turkmenistan, books 5919
  - woody plants
    - Greece 1325, 7243
    - Sri Lanka, books 3300
- ***Flourensia oolepis,*** mountain forests, synecology, Argentina 2148
- **Flowering**
  - *Abies alba,* forest decline, Slovenia 9862
  - *Acacia,* climate, site factors, soil water, Australia 3707
  - *Acrocomia aculeata,* fruiting, Brazil 9880
  - bacterial diseases, *Erwinia amylovora, Crataegus,* Netherlands, control 612
  - *Betula pendula,* seed production, increment 7727
  - *Cercidium microphyllum,* phenology, USA 3030
  - deciduous forests, phenology, seasonality, Temperate Zones 8126
  - forest trees, phenology, fruiting, Venezuela 5368
  - induction
    - conifers, seed orchards, Germany 6511
    - *Eucalyptus nitens,* plant growth regulators, Australia 4734
    - forest trees, Tropics, reviews 8955
    - *Larix,* plant growth regulators, gibberellins 8952
    - *Pinus sylvestris,* Poland, pruning, gibberellins 1317
    - *Santalum album,* gibberellins, India 2099
  - *Larix laricina,* buds, gibberellins, plant development 9848
  - *Madhuca longifolia,* fruiting, medicinal plants, India 988
  - phenology
    - Germany 9780
    - subalpine forests, insects, Japan 1304
  - *Picea abies*
    - grafting, seed orchards, clonal variation, Poland 841
    - grafts, shoots, nutrients, Poland 1132
    - molecular genetics 5504
    - plant growth regulators
      - gibberellins 3777
        - temperature 3829
  - *Picea glauca,* gibberellins, effects 9871
  - *Pinus nigra,* genetic variation 8214
  - *Pinus sylvestris,* seed orchards, fertilizers, seed production, Finland 5063
  - *Pinus taeda,* seed orchards, USA, variation 9877
  - *Pseudotsuga menziesii*
    - buds, plant morphology, techniques, ionizing radiation 4732
    - plant composition, plant growth regulators, plant nutrition, nitrogen 4672
  - seed orchards, techniques, reviews 9428
  - *Shorea,* Peninsular Malaysia 472
  - *Tectona grandis,* seed quality, India 482
  - tropical forests, phenology, classification 2928
  - *Vaccinium vitis-idaea,* Ukraine 481

Flowering *cont.*
  woody plants, rain forests, climate, Chile 2930
Flowers
  anatomy, *Leptospermum,* pollination 2033
  Clusia nemorosa, Apidae, behaviour, Brazil 9883
  Couroupita guianensis, India, biology 9867
  Cryptomeria japonica, tree breeding, inheritance, male sterility 4831
  cycads, insects, Australia 3038
  development
    broadleaves, reviews 2050
    Caesalpinieae, taxonomy 8976
    conifers, reviews 2050
    Fabaceae, plant morphology, phylogeny 8975
    Populus deltoides 6420
    Tasmannia 476
  discoloration, *Magnolia* 450
  essential oils, *Couroupita guianensis* 6441
  Guettarda poasana, nectar, antifungal properties 1250
  Lawsonia inermis, volatile compounds 9803
  Magnolia grandiflora, ovules, development, morphology 2931
  morphology
    Adansonia, pollination 6512
    Dahlia, Mexico 1212
    Paulownia, phenology, Pakistan 6389
    tropical forests, pollination 3036
    variation, *Cordia alliodora,* reproductive behaviour, incompatibility 8123
  nectaries, morphology, Bignoniaceae 8893
  Picea abies, plant growth regulators, gibberellins, metabolism, translocation 9846
  Pinus, palaeobotany, Canada 5378
  Populus, pollination, abscisic acid, measurement 1313
  Prosopis, reproductive behaviour, morphology 2051
  secretion, *Caesalpinia,* plant morphology, taxonomy, ecology 8901
  stamens
    Lauraceae, evolution 4837
    Laurales, evolution 4837
Fly ash, *Acacia gerrardii,* reclamation, Zimbabwe 7564
Fodder
  Acacia berlandieri, foliage, chemistry, USA 9823
  Acacia nilotica, fruits, production, Ethiopia 2670
  Acacia tortilis, fruits, production, Ethiopia 2670
  Atriplex, choice of species, genetic resources, India 2556
  Atriplex halimus, provenance, biomass production, Mediterranean Region 1676
  Ficus religiosa, foliage, India, plant composition, nutritive value 8676
  Gliricidia sepium
    cutting frequency, Cuba 6949
    provenance trials, agroforestry, Indonesia 8567
  Leucaena, variety trials, Brazil 8568
  Leucaena leucocephala, production, nutritive value, reviews 8677
  Medicago arborea, provenance, biomass production, Mediterranean Region 1676
  multipurpose trees
    biomass production, contour cultivation, Sri Lanka 1799
    choice of species, Nepal 6948
    conferences 8489
    foliage, chemistry, India 7170
    Nepal, conferences 2461
  production
    Calliandra calothyrsus, cutting date, Burundi 2671
    Gliricidia sepium
      agroforestry, Nigeria 8421
Fodder *cont.*
  production *cont.*
    Gliricidia sepium cont.
      cutting programmes, Nigeria 2672
    Leucaena leucocephala
      agroforestry, Nigeria 8421
      cutting programmes, Nigeria 2672
    management, *Ficus subincisa,* Nepal 6947
    multipurpose trees, species trials, Indonesia 3371
    Sesbania sesban
      India 9559
      variety trials, Ethiopia 9560
    watershed management, development projects, India 2396
  supply balance, surveys, India 8678
  trees, agroforestry, Nepal, conferences 8490
Fodder plants, genetic resources, India 3050
Fog
  cloud forests
    acid deposition, Venezuela 3650
    Venezuela 3544
Foliage
  Abies, chemotaxonomy, monoterpenoids 3043
  Abies alba
    air pollution, Slovakia 9742
    stomata, distribution, photosynthesis 2948
  Abies balsamea, air pollution, metals, Canada 8833
  abscission, *Pseudotsuga menziesii,* crown, development 7163
  Acer, cultivars, plant anatomy, plant morphology 8458
  Acer saccharum
    drought injury, Canada, abscisic acid 278
    frost injury, Canada, abscisic acid 278
    herbicide residues, Canada 5139
  Aesculus hippocastanum, pollution, New Zealand, heavy metals 3675
  age
    forest trees, photosynthesis, Costa Rica 6493
    Heliocarpus appendiculatus, light, plant nutrition, photosynthesis 6491
    leaf area, *Abies balsamea,* USA 5370
    Picea abies, plant nutrition, Western Europe 7958
    Pinus sylvestris, plant nutrition, crown, Finland 3622
  Alibertia edulis, chemistry, triterpenoids 8086
  amino acids, conifers, temperature, photoperiod, seasonal variation 9842
  anatomy
    Betula pendula
      air pollution, ozone, Finland 6336
      tissue culture, light, photosynthesis 8581
    Caesalpinia, glands, taxonomy 2967
    Caesalpinioideae, taxonomy 8067
    chlorophyll, mangroves, India 9790
    Eugenia, Brazil, keys 2038
    Moraceae, light intensity, photosynthesis 3731
    pigments, *Ginkgo biloba,* senescence 4649
    Pinus, epidermis 1217
  Annona squamosa, extractives, bioassays 6444
  antioxidants
    Picea abies, forest decline, Germany 4723
    Pinus sylvestris, air pollution, Germany 6337, 6355
  Austromyrtus, essential oils, chemistry 8075
  Betula alba, air pollution, heavy metals, Finland, insect pests 4886
  Betula pendula, phenology, defoliation, plant nutrition, temperature 4617
  Betula pubescens, air pollution, defoliation, Finland, TCA 1165
  Betula tortuosa
    morphology, Finland, variation 2933
Foliage *cont.*
  Betula tortuosa cont.
    plant composition, Finland, variation 2933
    plant water relations, Finland, variation 2933
  biomass production
    Grewia optiva, defoliation, increment, India 6147
    Morus nigra, nitrogen fertilizers, India 7801
  birds, *Tetrao urogallus, Pinus sylvestris,* browse, Norway 4056
  Bischofia javanica, chemistry, steroids 1237
  broadleaves
    crown, light intensity, plant morphology, development 2014
    enzymes, isoenzymes, seasonal variation, UK 3770
    ozone, deposition 1171
    phenology, photosynthesis, plant water relations, Venezuela 4704
    phenols, plant nutrition 2994
    photosynthesis, Japan, measurement, techniques 3316
    plant morphology, apical meristems 2044
    plant water relations, biomass production, India 8821
    Sri Lanka, chemical composition 3751
    stand characteristics, browse, nutritive value 3196
    stomata, density, carbon dioxide enrichment, Italy 2048
  browse, phenology, biomass production, variation, Mali 7148
  carbohydrates, terpenoids, insect pests, *Choristoneura occidentalis, Pseudotsuga menziesii* 5718
  carotenoids, seasonal variation, conifers, photosynthesis, USA 6477
  Cedrela salvadorensis, Costa Rica, flavonols 9828
  Chamaecyparis pisifera, chemistry, diterpenes 5390
  characteristics, vegetation types, statistical analysis 3718
  chemistry
    Abies mariesii, maltol 4670
    Acacia, browsing damage, plant morphology, South Africa 5808
    Acacia nilotica, genetic variation, provenance, India 3141
    amino acids, *Adansonia digitata* 7176
    ceratoulmin, fungal diseases, *Ophiostoma, Ulmus minor* 2269
    Chamaecyparis obtusa, terpenoids 4671
    Cryptomeria japonica, terpenoids 4671
    Eucalyptus, provenance, chemotaxonomy, Australia 2986
    Fagus sylvatica, air pollution, Switzerland 336
    forest trees
      air pollution, Slovakia 9745
      Australia 7081
      esters 1253
      seedling growth, photosynthesis, India 1261
      soil chemistry, nitrogen, USA 3576
    insect pests, *Lymantria dispar, Populus,* biological control 9192
    multipurpose trees, fodder, India 7170
    Picea abies
      air pollution
        indicator plants, Sweden 1152
        ozone 3652
      provenance
        frost resistance
          air pollution
            reviews 9679
            UK 9679
    Picea glauca, fertilizers, Canada 887
    Pinus, air pollution, chlorinated hydrocarbons, Finland 7989-7990

Foliage *cont.*
- chemistry *cont.*
  - *Pinus elliottii*, canopy, remote sensing, USA 8732
  - *Pinus massoniana*, air pollution, sulfur dioxide, photosynthesis 3669
  - *Pinus sylvestris*
    - air pollution, indicator plants, Sweden 1152
    - fertilizers, Finland 4297
    - nutrient deficiencies, nitrogen, ultrastructure 8822
    - salt injury, roadside plantations, Finland 348
  - *Prosopis cineraria*, provenance, India 9050
  - *Rhus hirta*, air pollution, zinc, USA 9748
  - seasonal variation
    - *Acacia berlandieri*, browse, USA 9823
    - aging, *Avicennia marina*, Pakistan 7192
    - *Pseudotsuga menziesii*
      - pest resistance 8093
      - USA 8093
  - *Taxus*, chemotaxonomy, flavonoids 5391
  - TCA, forest trees, air pollution, Finland 338
  - ultrastructure, *Pinus sylvestris*, nutrient deficiencies, phosphorus 6322
- chlorophyll
  - fluorescence, *Picea abies*, frost injury 1280
  - *Quercus ilex*, Italy, methodology 781
- chloroplasts, ultrastructure, *Pinus pinaster*, air pollution, Spain 3727
- *Cinnamomum*, essential oils, Sri Lanka 416
- colour
  - broadleaves, Japan, seasonal behaviour 8045
  - conifers, forest decline, fertilizers, France 2610
  - pigments, *Acer platanoides*, senescence 5410
- conifers
  - air pollution
    - diffusion models 4565
    - sulfur dioxide, Germany 5315
  - drought, plant anatomy 6296
  - light, interception, USA 3733
  - optical properties 1059
  - plant nutrition, air pollution, UK 6453
  - waterlogging, plant anatomy 6296
- *Cryptomeria japonica*
  - sesquiterpenoids 8910
  - thinning, crown, simulation 4352
- *Cupressus bakeri*
  - chemistry, sesquiterpenoids 8087
  - genetic variation, taxonomy, USA 2198
- *Cupressus funebris*, diterpenes 427
- cuticle
  - absorption, *Betula pendula*, ozone 3661
  - *Cercis canadensis*, transpiration 5371
  - forest trees, air pollution, conferences 2450
  - permeability, conifers, forest decline, Germany 2089
- *Cyathea spinulosa*, terpenoids 9820
- cytology, *Avicennia marina*, salt tolerance 6424
- damage
  - *Acer saccharum*, remote sensing 4034
  - anatomy, *Acer saccharum* 8939
  - broadleaves, air pollution, India 5328
  - conifers, air pollution, fluorides, Norway 5331
  - forest trees, air pollution, fluorides, Norway 5330
  - phenolic compounds, *Populus*, air pollution, sulfur dioxide 1161
  - *Picea abies*
    - air pollution
      - deposition, Finland 9746
      - Slovakia 9741

Foliage *cont.*
- damage *cont.*
  - *Picea rubens*, acid deposition, USA 5313
  - *Pinus halepensis*, air pollution, ozone 3653
  - *Prosopis juliflora*, air pollution, smelters, USA 8842
- decomposition, *Liriodendron tulipifera*, streams, USA 7917
- deposition, conifers, air pollution, mercury, Canada 8854
- development
  - Arecaceae 3730
  - chemistry, *Morisonia americana*, photosynthesis, Venezuela 1264
  - *Fraxinus pennsylvanica*, pruning, Canada 2956
  - *Liquidambar styraciflua*, photosynthesis, ultraviolet radiation 8764
  - nitrogen, tropical forests, Panama 315
  - *Picea abies*, biochemistry, enzymes 3016
  - *Pinus ponderosa* 2042
  - *Quercus robur*, genetic variation, Croatia 4616
  - *Salix viminalis*, plant nutrition, nitrogen 2854
- distribution
  - *Picea abies*, air pollution, canopy, Czech Republic 7088
  - *Pinus sylvestris*, light, plant competition 2950
- epidermis, *Calamus*, canes and rattans, plant anatomy, taxonomy 8135
- essential oils
  - *Eucalyptus kirtoniana*, Mauritius 6440
  - *Persea bombycina* 6438
- *Eucalyptus*
  - epidermis, anatomy 7165
  - essential oils
    - Australia 2973
    - chemistry 8076
  - plant water relations, water use, equations, theory 7667
  - waterlogging, salt tolerance, seedling growth, plant water relations 1115
- *Eucalyptus deglupta*, progeny testing, Costa Rica 9985
- *Eucalyptus regnans*, basal area, soil chemistry, New Zealand 4394
- extracts
  - *Eucalyptus globulus*, allelopathy 8175
  - multipurpose trees, allelopathy 3106
  - mycorrhizas, *Pinus sylvestris*, allelopathy 2245
- *Fagus sylvatica*
  - air pollution, provenance, Italy, damage 5340
  - carbon dioxide enrichment, plant water relations 1882
  - enzyme activity 8933
  - Germany, flavanols 433
  - optical properties 1255
- *Ficus religiosa*, fodder, India, plant composition, nutritive value 8676
- flavonoids, *Agathis*, chemotaxonomy, New Zealand 8082
- foliar uptake, microbial flora, *Picea abies*, methodology 3323
- forest trees
  - branches, habit, New Zealand 4620
  - buffering capacity, acid rain 3691
  - essential oils, Japan, seasonal variation 6445
  - nitrogen, nutrient allocation, UK 1944
  - photosynthesis, plant water relations, Cameroon 313
- forests, remote sensing, radar, backscatter 7677
- *Forsythia*, lignans 8909
- *Fraxinus excelsior*, water stress, France 1936
- fungal diseases
  - *Acer pseudoplatanus*, Germany 7405
  - *Quercus ilex*, Europe 5654
- gas exchange, forest trees, air pollution, mercury 8852

Foliage *cont.*
- *Griselinia littoralis*, frost resistance, plant anatomy, New Zealand, damage 8761
- growth
  - *Fraxinus pennsylvanica*, pruning 4619
  - *Gmelina arborea*
    - plant nutrition
      - nitrogen, photosynthesis 1133
      - phosphorus, photosynthesis 1133
  - morphology, *Pinus sylvestris*, acid deposition, Finland 3647
  - *Salix viminalis*, plant nutrition, nitrogen, plant water relations 8054
- *Hymenaea courbaril*, flavanoids 9814
- injuries, chemistry, *Salix* 6492
- insect pests
  - *Lymantria dispar*, forest trees, biology 637
  - *Salix*, USA 4032
- *Juglans regia*, genetic variation, isoenzymes, Italy, morphology 5554
- *Juglans sinensis*, provenance, fruits, Korea Republic, morphology 9783
- *Juniperus chinensis*, chemistry, terpenoids 426
- *Juniperus phoenicea*, essential oils, Italy 435
- juvenility, *Juniperus occidentalis*, plant physiology, USA 9791
- leachates, *Eucalyptus*, wetlands, Australia 8824
- leaching, broadleaves, precipitation 7089
- leaf age, *Picea abies*, waxes, forest decline, Europe 6443
- leaf area index
  - coniferous forests, remote sensing, USA 1342
  - estimation, *Eucalyptus marginata*, forests, Australia 7661
  - *Picea abies*
    - Austria, measurement, equipment 7652
    - canopy, simulation 2512
  - *Pinus*
    - measurement 4186
    - techniques 5944
  - *Pinus radiata*, phenology, New Zealand 2010
  - *Pinus sylvestris*, Sweden, measurement, equipment 1610
  - rain forests, deforestation, Brazil 3736
- leaf conductance, *Pinus sylvestris*, air pollution, deposition, Sweden 7991
- length, *Nothofagus*, palaeoecology, Australia 3065
- lenticels, *Eucalyptus*, plant anatomy, Australia 8055
- life tables, conifers, Sweden 8056
- *Liquidambar styraciflua*, nitrogen fertilizers, cycling, USA 8823
- *Liriodendron tulipifera*, ozone, effects 2867
- *Litsea gardneri*, Sri Lanka, polysaccharides 9817
- *Maackia amurensis*, isoflavones 9811
- major elements, *Pinus sylvestris*, Finland 5396
- mangroves
  - *Avicennia germinans*, chemistry, iridoids, glucosides 8914
  - *Avicennia marina*, Saudi Arabia, heavy metals 2980
  - Belize, damage 625
  - broadleaves, Kenya, chemistry 4676
  - light
    - Australia, phenolic compounds 434
    - phenolic compounds 434
- measurement
  - *Pinus sylvestris*, canopy, insolation, Poland 3474
  - *Quercus cerris*, Italy, equations 9582
- mesophyll, ultrastructure, *Abies alba*, frost resistance, Slovakia 7150
- mites, woody plants, mutualism, Korea Republic 3172
- morphology
  - Acari, woody plants, Australia 621

- **Foliage** *cont.*
  - morphology *cont.*
    - Arecaceae, height, Costa Rica 5376
    - broadleaves, plant physiology, USA 4692
    - chemistry
      - *Pinus,* site class assessment, Sweden 3745
      - variation, forests, South Africa 8897
    - coniferous forests, plant nutrition, USA 1346
    - *Crataegus monogyna,* taxonomy 2960
    - *Eucalyptus,* taxonomy 494
    - *Eucalyptus globulus,* genetic variation, Australia 5556
    - fens
      - synecology
        - New Zealand 3898
        - UK 3898
    - fungal diseases, *Discula, Cornus florida,* acid deposition 2279
    - *Gleditsia triacanthos* 7154
    - insect pests, *Altica bimarginata, Salix cordata* 5744
    - *Metrosideros polymorpha,* USA 2951
    - palaeobotany
      - taxonomy
        - Australia, Podocarpaceae 497
        - *Retrophyllum,* New Zealand 497
    - Podocarpaceae, palaeobotany, taxonomy, Australia 497
    - Proteaceae, rain forests, Australia 4651
    - *Quercus rubra,* photosynthesis, plant water relations, USA 1265
    - vegetation types, soil fertility, plant nutrition, Peninsular Malaysia 6551
  - movement
    - *Populus*
      - gas exchange 3785
      - plant physiology, USA, temperature 3799
  - Myrtaceae, chemotaxonomy, Australian Oceania, essential oils, chemistry 415
  - nastic movements, *Albizia lophantha,* biochemistry, light 1277
  - nitrogen
    - forest trees, respiration, dark, simulation 8102
    - labelling, *Alnus,* nitrogen fertilizers 8081
    - natural regeneration, shade, tolerance, South Africa 5468
  - nitrogen metabolism, *Picea abies,* air pollution, water stress, Germany 449
  - *Nothofagus menziesii,* frost resistance, plant anatomy, New Zealand, damage 8761
  - nutrients
    - analysis, *Salix viminalis,* plant nutrition, Sweden 318
    - forest trees, precipitation, Puerto Rico 1938
    - variation, *Quercus leucotrichophora,* India 429
  - oleoresins, monoterpenes, *Picea abies,* genetic variation, Sweden 1421
  - optical properties
    - *Acer platanoides*
      - chlorophyll 2996
      - plant water relations 1109
    - *Aesculus hippocastanum,* chlorophyll 2996
    - broadleaves 7032
    - forest trees
      - air pollution, ozone, carbon dioxide enrichment 9749
      - Australia 6222
      - plant composition, analytical methods 1234
      - remote sensing 1256
    - *Pseudotsuga menziesii,* chlorophyll, photosynthesis 2066
    - ultraviolet radiation 3539
  - ornamental woody plants, water stress, plant hairs 2829

- **Foliage** *cont.*
  - *Persea thunbergii,* seeds, provenance, Korea Republic, variation 9978
  - pH
    - *Fagus sylvatica,* photosynthesis, carbon dioxide enrichment 2084
    - *Picea abies,* photosynthesis, carbon dioxide enrichment 2084
  - phenolic acids, *Pinus pinaster,* seedlings, stress 6463
  - phenolic compounds
    - conifers, soil pH, USA 9690
    - *Picea abies,* forest decline, Germany 7208
    - *Pinus sylvestris,* seedlings, air pollution, sulfur dioxide 7086
  - phenology, crown, development, photosynthesis, theory 8042
  - phloem, *Abies alba,* air pollution, provenance, Italy 6330
  - physiology, conifers, seedlings, air pollution, sulfur dioxide 8107
  - *Picea abies*
    - acid deposition, damage 8839
    - air pollution
      - Austria 4674, 9750
      - ozone, acid deposition 7988
      - volatile compounds
        - Germany, insecticide residues 6342
        - residues 5334
    - biochemistry, air pollution, nitric oxide 3660
    - enzymes, metabolic detoxification 4705
    - essential oils, ozone, Sweden 6446
    - light, plant morphology, Estonia 7030
    - lignification, peroxidases 4679
    - nutrient deficiencies
      - magnesium fertilizers, Germany 132
      - manganese, plant physiology 3642
    - optical properties 1254
    - pesticide residues, Finland 6455
    - stomata, distribution, photosynthesis 2948
    - Switzerland, waxes, environmental effects 5220
    - Western Europe
      - chemistry
        - alkali metals 5394
        - rare earth elements 2982
  - *Picea pungens,* crystals 6404
  - *Picea rubens,* cold injury, USA, damage 7036
  - pigments
    - *Picea abies,* nutrient deficiencies, magnesium 4536
    - seasonal variation, mangroves, India 4675
  - *Pinus*
    - air pollution, heavy metals, Argentina 4555
    - cycling
      - fertilizers, USA 2859
      - weed control, USA 2859
  - *Pinus halepensis,* damage, salt spray 1172
  - *Pinus monophylla,* biomass, estimation 4379
  - *Pinus pinaster*
    - enzymes, farnesyl-diphosphate farnesyltransferase, purification 8928
    - Spain, chemical composition, utilization 6456
  - *Pinus pinea,* air pollution, Italy, waxes, damage 5341
  - *Pinus ponderosa,* ozone, gas exchange, carboxylation 6497
  - *Pinus radiata*
    - age, branches, biomass, New Zealand 3734
    - air pollution, nutrient deficiencies, major elements 1948
  - *Pinus strobus,* air pollution, USA, reviews 2872
  - *Pinus sylvestris*
    - air pollution
      - cuticle, waxes 2045
      - forest decline, Finland 7092

- **Foliage** *cont.*
  - *Pinus sylvestris cont.*
    - air pollution *cont.*
      - heavy metals, Germany 4555
      - organochlorine compounds, Germany 4556
      - plant physiology 3789
      - pulp and paper industry, Finland 5314
    - defoliation, branches, increment, Finland 8892
    - endophytes, acid deposition, Finland 2226
    - enzymes
      - glutamate dehydrogenase, air pollution, Germany 6479
      - isoenzymes 3766
    - Finland, chemistry, polyamines 6452
    - genetic variation 8199
    - pesticide residues, Europe 5343
    - plant nutrition, waxes, morphology 1129
    - roots, microbial flora, Poland 7382
    - sapwood, plant water relations, climate, Europe 5284
    - seedlings, air pollution, sulfur dioxide, damage 1164
    - shoots
      - light
        - Finland 2035
        - Sweden 2035
  - *Pinus taeda*
    - basal area, USA, correlation 2927
    - thinning, fertilizers, USA 2011
  - *Piper guineense,* extractives, bioassays 6444
  - *Pittosporum eugenioides,* frost resistance, plant anatomy, New Zealand, damage 8761
  - plant growth regulators
    - *Picea abies,* air pollution, Germany, damage 2995
    - *Pinus sylvestris,* seedling growth, plant nutrition, nitrogen 444
  - Podocarpaceae, frost resistance, Chile, lipids 274
  - polyamines, *Corylus avellana,* pruning 6436
  - polyphenols
    - analytical methods
      - *Calliandra calothyrsus* 6817
      - *Gliricidia sepium* 6817
  - *Populus*
    - air pollution, senescence, chemistry, raffinose 334
    - morphology 5385
  - *Populus deltoides,* drought resistance, water balance, plant composition 1121
  - *Populus interamericana*
    - injuries, molecular genetics 2214
    - ozone, uptake 8495
  - *Populus pruinosa,* soil salinity, Tajikistan, nutrients 1940
  - *Populus tremula* × *Populus alba,* genetic transformation, enzymes 5543
  - production, *Pinus taeda,* climate, stand development, USA 6977
  - *Pseudotsuga menziesii*
    - biochemistry, seasonal variation, USA 1281
    - genetic variation, USA, increment 2183
    - maturation, ontogeny, measurement 4652
  - *Psidium guajava,* epidermis, anatomy 7165
  - quality
    - *Morus alba*
      - phosphorus fertilizers
        - mycorrhizas, India 7802
        - silkworms, India 7802
    - *Quercus*
      - air pollution, organic compounds, USA 7105
      - India, tannins 1244
      - light, temperature, USA 3791
  - *Quercus ilex,* fertilizers, irrigation, Spain, plant composition 3752
  - *Quercus ithaburensis,* phenology, genetic variation, Israel 3709

Foliage *cont.*
- *Quercus rubra*
  - ozone, plant physiology, seasonal variation 4703
  - plant water relations 6299
- reflectance
  - forest trees, remote sensing, stress 2769
  - *Pinus elliottii,* plant composition, chlorophyll 6465
  - remote sensing 1857
- resin canals, insect pests, *Blepharida, Bursera schlechtendalii,* pest resistance 5751
- responses, *Picea rubens,* air pollution, sulfur dioxide, Canada 8856
- RNA, isolation, techniques, *Pinus strobus* 5499
- root nodules, *Frankia,* broadleaves, France, nutrients 1909
- Rubiaceae, chemistry, glucosides 9818
- *Salix,* coppice, UK, demography 6097
- *Salix babylonica,* hybrids, chemotaxonomy, flavonoids 583
- *Salix viminalis,* nitrogen fertilizers, plant water relations, growth 3803
- seasonal variation
  - *Phlomis fruticosa,* Greece, morphology, physiology 2047
  - *Picea abies*
    - air pollution, water stress, Germany 449
    - plant growth regulators, IAA, Czech Republic 457
- shedding
  - *Castanea sativa,* enzymes 3776
  - *Picea abies*
    - forest health, Germany, methodology 3319
    - photosynthesis
      - air pollution
        - Czech Republic 2878
        - simulation 5405
  - *Pinus sylvestris*
    - forest health, UK 1301
    - plant nutrition, nitrogen, Sweden 4528
- street trees, heat stress 8758
- stress, *Pinus sylvestris,* ethylene, biosynthesis 5409
- sugars, broadleaves, photosynthesis 6485
- *Tabernaemontana subglobosa,* indole alkaloids 9821
- *Taxus brevifolia*
  - medicinal plants, USA, taxane 417
  - taxanes, methodology 2496
- *Taxus cuspidata,* chemistry, extractives 3738
- *Taxus wallichiana*
  - diterpenoids 9806
    - phenolic compounds 9800
- *Taxus yunnanensis,* taxanes 9807
- *Terminalia,* genetic variation 5525
- terpenoids, insect pests, Lepidoptera, conifers, Canada 9146
- texture, broadleaves, plant nutrition, Turkey 1224
- toughness, broadleaves, woody plants 1230
- transpiration, photosynthesis, simulation, equations 1620
- trichomes
  - broadleaves, ultraviolet radiation, damage 7161
  - *Quercus*
    - hybrids, taxonomy 1215
    - Southern Europe 6403
- tropical forests, phenology, seasonality, climatic change 8043
- *Tsuga heterophylla,* biochemistry, seasonal variation, USA 1281
- ultrastructure, *Pinus sylvestris,* fertilizers, calcium ammonium nitrate, Finland 7079
- *Umbellularia californica,* habit, variation, chemistry, flavonoids 8091
- variation, *Pinus sylvestris,* population genetics, Poland 7350
- vegetation types, Singapore, pest resistance 6454
- *Vitex negundo,* essential oils 8079

Foliage *cont.*
- volatile compounds, *Quercus ilex,* light, monoterpenes 4691
- waxes
  - conifers, stomata, dry deposition 8841
  - morphology
    - injuries, *Picea abies,* Austria 8050
    - *Picea abies,* air pollution, indicator plants 8050
  - *Pinus radiata,* indicator plants, air pollution, New Zealand 3754
  - *Pinus sylvestris,* air pollution, damage, Poland 1227
- weight
  - chemistry, *Pinus contorta,* sulfur fertilizers, nitrogen fertilizers, Canada 897
  - *Picea glauca,* fertilizers, Canada 887
  - *Pinus sylvestris*
    - canopy, insolation, Poland 3475
    - wood anatomy, climate, correlation 8058
- wettability, *Picea abies,* Germany, measurement 2953
- woody plants
  - branches, habit, New Zealand 4620
  - chemistry, chlorinated hydrocarbons, measurement 9334
  - light, Estonia, measurement, plant morphology 4660
- zeaxanthin, *Acer platanoides,* photosynthesis, light 2085

Foliar diagnosis, *Pinus radiata,* agroforestry, plant competition, statistical analysis, New Zealand 4957

Fomes annosus (*see Heterobasidion annosum*)

Fomes fomentarius
- fungal diseases 9093
  - *Platanus acerifolia,* injuries, inoculation 8290

Fomes marginatus (*see Fomitopsis pinicola*)

Fomes pini (*see Phellinus pini*)

Fomes pinicola (*see Fomitopsis pinicola*)

Fomitopsis pinicola, fungal diseases, *Abies religiosa,* Mexico 7397

Fontanesia
- geographical distribution
  - Asia 7262
  - Europe 7262

Forest administration
- forest policy
  - Australia 4242
  - legislation, forest management, economics, Russia 9386
  - UK 5028
- forestry
  - forest economics, Mozambique 2775
  - nature conservation, New Zealand 7588
  - organizations 3340
- Germany 7021
- history
  - Germany 4235, 9385
  - Poland 1625
- legislation, regulation, Peninsular Malaysia 6858
- nature conservation
  - Europe 10130
  - Germany 10131
- organizations
  - Central Europe 9660
  - Iran 1874
- protection of forests, Poland 3343

Forest borders
- *Aspidosperma quebracho-blanco,* old-growth forests, Argentina, stand structure 7271
- birds, predation, USA 9214
- conifers
  - air pollution, deposition, Netherlands 6345
  - clear felling, USA, stand characteristics 1333
- deciduous forests, statistical analysis, Canada 5962
- forest ecology, understorey, simulation, Brazil 4748
- ground vegetation, synecology, Europe 9012

Forest borders *cont.*
- landscape ecology, Canada, species diversity 4747
- management, ecology, Slovenia 2717
- *Pseudotsuga menziesii*
  - air temperature, simulation, USA 2793
  - microclimate, USA 5347
- savannas, Tropics, books 4165
- *Schinopsis quebracho-colorado,* old-growth forests, Argentina, stand structure 7271
- synecology
  - plant succession, USA 3098
  - USA 3874
- *Triplochiton scleroxylon*
  - forest plantations
    - increment
      - Cameroon 4594
        - equations 5013
- wildlife, boreal forests, clear felling, Sweden 5810

Forest damage, diagnosis, *Picea abies,* biochemistry, Germany, reviews 6503

Forest decline (*see also* Dieback)
- *Abies alba*
  - bark, anatomy, injuries 4626
  - dendrochronology
    - France, air pollution, climate 2091
    - Italy 8942
    - Switzerland, air pollution, climate 2091
  - fertilizers, France, plant nutrition, soil fertility 890
  - flowering, Slovenia 9862
  - forest economics, Croatia 4719
- *Abies amabilis,* volcanic ash, USA 1995
- *Abies fraseri,* USA 2888
- *Acer saccharum*
  - Canada 3813
  - dendrochronology, Canada, simulation 1591
  - soil chemistry, plant composition, USA 9860
  - soil fauna, Oligochaeta, Canada 5275
  - soil water, freezing, snow, Canada 2811
- air pollution
  - climate, Central Europe 8946
  - Europe 5417
  - France, legislation, research, reviews 1159
  - ground vegetation, synecology, synecology, Czechoslovakia 339
  - international cooperation
    - Finland 6859-6860
    - Norway 6859
    - Russia 6859-6860
  - North America 5417
  - organic compounds, reviews 8004
  - Sweden 4564
- aluminium, toxicity, plant nutrition, France, reviews 4717
- *Azadirachta indica,* Sahel 1300
- bottomland forests, flooding, Greece 9236
- broadleaves
  - France 1297, 3817
  - mountain forests, Croatia 4722
- *Chamaecyparis nootkatensis,* climatic change, USA 8121
- climate 3809
- coniferous forests
  - air pollution, Norway, assessment 7207
  - Norway, regions, variation 9859
  - Russia 8941
  - synecology, USA, stress factors 2121
  - USA 7201
- conifers
  - air pollution, ozone, reviews 7984
  - foliage
    - colour, fertilizers, France 2610
    - cuticle, permeability, Germany 2089
  - forest management, France 3822
  - increment, Austria, simulation 7202
  - mountain forests, air pollution, France 3814
  - population dynamics, simulation, Austria 6825

Forest decline *cont.*
  conifers *cont.*
    shoots, defoliation, Germany 9865
    soil parent materials, geology, France 8943
  Eucalyptus, plant nutrition, nitrogen, enzymes, Australia 3635
  Fagus sylvatica
    air pollution, Poland 2873
    crown, increment, Switzerland, simulation 8944
    dendrochronology, France, growth rings, increment 4991
    forest management, France 3821
    France 3816
  forest health, France, monitoring 3818
  forest inventories
    Germany 9628
    Italy 3026
    Switzerland 4721
  forest management
    France, insect pests, fungal diseases, interactions 3819
    Kazakhstan 8945
  forest pests 3807
  forest trees
    coastal plant communities, France 3808
    crown
      Italy 3025
        assessment, methodology 5951
    degraded forests, urban areas, Korea Republic 9312
    genetic variation, Europe 6583
    reproductive behaviour, crown, UK 3033
    soil water, chemistry, salt injury, Denmark 1295
  France, conferences 3312
  fungal diseases
    Cronartium ribicola, Pinus albicaulis, USA 470
    Ophiostoma, Quercus, Europe 4020
    Phytophthora, Quercus robur, Germany 8292
    Quercus, drought resistance, Italy 8119
  Germany, surveys 6505
  insect pests
    Matsucoccus feytaudi, Pinus pinaster, France 4036
    Rhyparida limbatipennis, broadleaves, Australia 7204
    Thaumetopoea pityocampa, Pinus pinaster, France 4038
  Libocedrus chilensis, stand characteristics, mortality, Argentina, analysis 3019
  mixed forests, synecology, USA, stress factors 2121
  Picea abies
    air pollution
      nitrogen cycle, Germany 3823
      photosynthesis, Germany 2090
    fertilizers, France, growth 4303
    foliage
      antioxidants, Germany 4723
      phenolic compounds, Germany 7208
    genetic variation, air pollution, sampling, Italy 2191
    Germany, statistical analysis 4198
    ground vegetation, fertilizers, Germany 9463
    nutrient deficiencies, fungal diseases, Austria 8117
    photosynthesis, photoinhibition, metabolism, Germany 1291
    plant nutrition
      Germany
        amino acids 3805
        magnesium 1127
    plant physiology, chromosome aberrations, Austria 4727
    protection forests, fertilizers, Switzerland 7753
    remote sensing
      stand characteristics, Sweden 1855
      thematic mapper, damage, Czech Republic 7840

Forest decline *cont.*
  Picea abies cont.
    snow damage, Germany 9864
    soil amendments, France, rhizosphere fungi 2228
    soil chemistry
      fertilizers, plant nutrition, France 4302
      France, soil water 4488
    waxes, leaf age, Europe 6443
  Picea rubens
    acid deposition
      soil chemistry
        plant nutrition, aluminium 1141
        USA 1169
    dendrochronology, statistical analysis, USA 5915
  Pinus, France, insect pests, fungal diseases 3815
  Pinus albicaulis, remote sensing, USA 470
  Pinus halepensis, salt spray, France 1172
  Pinus massoniana, air pollution, sulfur dioxide, China 3669
  Pinus pinaster
    forest management, France 3810
    frost injury, soil types, France 3567
  Pinus radiata, air pollution, vehicles, Spain 1166
  Pinus sylvestris
    air pollution
      foliage, Finland 7092
      Poland 2873
  Pinus taeda, afforestation, mine spoil, USA 2092
  Pseudotsuga menziesii, nitrogen fertilizers, Netherlands, mycorrhizas 4296
  Quercus
    air pollution, soil chemistry, plant nutrition, Austria 5309
    Belgium, monitoring 8940
    dendrochronology, USA 9863
    diseases, Europe, reviews 4720
    drought, soil water, Spain 8120
    forest management, USA 6504
    France 3811-3812
    mycoplasmal diseases, Austria, phloem 8115
    Spain 9861
  Quercus petraea, mycorrhizas, soil chemistry, Romania 8773
  Quercus robur
    bottomland forests, Croatia, environmental factors 4726
    drought
      Poland
        fungal diseases 1299
        insect pests 1299
    silvicultural conversion, Croatia 6502
    silviculture, Croatia 4725
    stand characteristics, Croatia 4724
    stumpage value, Croatia 4459
    wood chemistry, heavy metals, air pollution, Poland 7095
  soil chemistry, plant nutrition, interactions 3820
  symptoms, *Quercus,* precipitation, Poland 1298
  Torreya taxifolia, USA, ecology 7200
  vesicular arbuscular mycorrhizas, *Acer saccharum,* soil chemistry, USA 10001
  volcanoes, soil air, carbon dioxide, USA 8874-8875
  World, reviews 5418
Forest ecology
  Abies alba, stand characteristics, Italy 8667
  Abies pinsapo, stand characteristics, canopy gaps, Spain 9024
  acid deposition, mycorrhizas, interactions, reviews 8840
  air pollution
    radionuclides, Europe, conferences 4177
    research, techniques 6354
    Russia 5332
    stand characteristics, stability, methodology 6811

Forest ecology *cont.*
  biogeochemistry, cycling, conferences 3310
  birds
    Certhia familiaris, boreal forests, fragmentation, Finland 1522
    Dryocopus martius, coniferous forests, fragmentation, Sweden 1521
    forest plantations, fragmentation, Netherlands 4067
    logging, Australia 4062
    USA, predators 3198
    vegetation types, Finland 4918
  boreal forests
    climate, Finland 8140
    climatic change, simulation, Finland 1621
    Coleoptera, species diversity, Sweden 1471
    conferences 6800
    forest management, Canada 4427
  broadleaves, forest fires, simulation 2920
  Chamaecyparis obtusa, dendrochronology, Japan 6761
  Chamaecyparis pisifera, natural regeneration, Japan 4749
  climatic change
    forest policy 1961
    simulation
      reviews 1960
      Sweden 3110
      USA 2790
  coniferous forests
    air pollution, Germany 6340
    altitude, Guatemala 5448
    USA, books 6785
  deciduous forests
    Coleoptera, species diversity, Sweden 1471
    growth models, USA, stress analysis 4223
    hurricanes, natural regeneration, Madagascar 6268
  deer, *Cervus elaphus, Pinus sylvestris,* grazing effects, UK 2392
  deforestation, USA 1550
  epiphytes, cloud forests, Costa Rica 3091
  Eucalyptus, direct sowing, establishment, Australia, reviews 2636
  Eucalyptus obliqua, silviculture, Australia, Carabidae 7417
  fauna, Lycaenidae, rain forests, China 10026
  fishes, water quality, conifers, USA 2170
  forest borders, understorey, simulation, Brazil 4748
  forest fires, simulation 7139
  forest litter, soil fauna, Formicidae, Costa Rica 5676
  forest management, France 8717
  forest trees
    climatic change, plant physiology, genetics, conferences 1606
    plant succession, plant competition, USA 7312
    stand structure, vegetation types, China 3073
  forestry, vegetation types, Asia, books, conferences 5922
  Formicidae, Germany 8323
  fragmentation, birds, deciduous forests, Canada 4916
  invertebrates, sclerophyllous scrub, forest fires, Australia 8324
  land classification, Austria 9640
  logging, biomass, Spain 2893
  mammals
    Eucalyptus, logging effects, Australia 3194
    logging, Australia 4062
  mangrove forests, Pacific Ocean 3911
  mapping, nature conservation, methodology 7003
  mixed forests
    air pollution, Slovakia 5329
    forest fires, South America 2916
  mycorrhizas, forest trees, USA 6610
  palaeoecology, plant succession, USA 6531

Forest ecology *cont.*
  Picea abies, boreal forests, forest management, Sweden 10029
  Pinus rigida, arthropods, USA 7420
  plant nutrition, root systems 8139
  Quercus, selective felling, Canada, plant colonization 3427
  rain forests
    books 3
    Brazil 524
    canopy, Tropics, research 536
    Formicidae, Australia 623
  research, Germany 9405
  riparian forests
    Belize, disturbance 1417
    USA, population dynamics 5442
  seed banks, UK 3831
  silviculture 8557
    reviews 4323
    sustainability 7813
    theory 3364
  simulation 3116
    forest management, plant succession, reviews 7681
  species diversity, plant succession, land use, USA 5461
  squirrels, *Sciurus vulgaris,* coniferous forests, fragmentation, Sweden 2390
  stand structure, remote sensing, mathematics 1411
  tropical forests
    Panama, books 5932
    silviculture, natural regeneration 9009
  Tsuga canadensis, land use, USA, history 717
  Virola surinamensis, logging, Brazil, damage 1173
  wildlife
    landscape, fragmentation, Australia, conferences 766
    logging effects, nature conservation, Australia, reviews 4129
    nature conservation, simulation 3279
    USA, fragmentation 4907
Forest economics
  Abies alba, forest decline, Croatia 4719
  afforestation
    agricultural land, Italy, economic theory 4461
    Japan, profits 7857
    UK, simulation 3531
  Ailanthus excelsa, agroforestry, farm forestry, India 9648
  air pollution
    damage
      Europe 2779
      North America 2779
  birds
    Strix occidentalis, conservation, USA 732
    Strix occidentalis caurina, nature conservation, USA 5820
  broadleaves, afforestation, agricultural land, subsidies, Italy 159
  Casuarina equisetifolia, social forestry, India 10119
  Christmas trees, Canada 4372
  conferences 765, 2482
  conifers, forest plantations, New Zealand, Korea Republic, foreign investment 8747
  cost benefit analysis, discount rates, estimation, development projects, India 5211
  Cupressus lusitanica, growth models, Ethiopia 6972
  deciduous forests, rotations, USA, basal area 4460
  deer, browsing damage, protection forests, Germany 7533
  deforestation
    Cambodia, land use, fishing 7570
    tropical forests, books 2449
  economic analysis, *Pinus resinosa,* yield forecasting, USA, computer techniques 4229
  ethics, forest management, sustainability, land ownership 2725
  Eucalyptus, silvicultural systems, Brazil, returns 5217

Forest economics *cont.*
  Fagus sylvatica, logging, France, profitability 9653
  finance
    forest management, Russia 5041
    USA 9399
  forest management
    Czech Republic, textbooks 10
    damage, decision making 1056
    decision making, simulation, Finland 7829
    France, investment 2785
    hunting, *Alces alces,* Canada 9219
    methodology 234
    multiple use, theory 2715-2716
    planning
      decision making, simulation, Denmark 9623
      policy, sustainability, Sweden 9647
      simulation 4426
    private forestry, Netherlands, methodology 265
    simulation, Developing Countries 3532
    Slovakia, textbooks 10
    sustainability, simulation 6834
    Sweden, simulation 3527
    valuation, Sweden 1053
  forest policy
    afforestation, carbon cycle, market economics 2780
    Central Europe 2770
    forest management, India 47
    Hungary 2771
    Mexico 2776
    Poland 2773-2774
    rural development, China 5982
    Russia 2772
    Slovakia 2774
  forest trees
    afforestation, agricultural land, Italy 158
    nature conservation, simulation, USA 1870
    non-wood forest products, Peninsular Malaysia 963
    silvicultural systems, simulation, USA 1870
    vegetative propagation, tree breeding, reviews 94
  forestry
    forest administration, Mozambique 2775
    nature conservation 7587
  forests, air pollution, Poland 1959
  fuel plantations, Germany 4252
  hunting, licenses, USA 3528
  investment, economic analysis, farm forestry, USA, computer techniques 37
  Italy, education 7856
  labour, income, assessment, equations 3360
  land use, sustainability 5856
  legislation
    forest policy
      Albania 2528
      Poland 2528
  logging
    Canada, analysis, socioeconomics 4457
    France 8746
      labour contracts 9407
    labour, Japan 6850
  models, protection of forests, forest management, North America 6248
  mountain forests, forest management 7856
  multiple use
    amenity and recreation areas, Germany 1049
    marketing, Germany 1048
    Pinus taeda, rotations, USA, simulation 6990
    valuation, Switzerland 264
  nature conservation
    Australia, cost benefit analysis, methodology 1052
    valuation
      Australia 3533
      simulation models, Norway 5218

Forest economics *cont.*
  non-wood forest products, valuation, Canada, reviews 4456
  old-growth forests, nature conservation, Canada 7015
  periodicals 4994
  Picea abies
    fertilizers, Austria 9465
    forest influences, peatlands, carbon cycle, Norway 2784
    silvicultural systems, Austria, simulation 6915
  Pinus radiata, forest plantations, rotations, Australia 6247
  Pinus sylvestris
    forest influences, peatlands, carbon cycle, Norway 2784
    thinning
      drainage, simulation 9521
      nitrogen fertilizers, Russia 9517
  Pinus taeda
    silviculture, USA, regeneration 954
    site preparation, chemical treatment, USA 1873
  planting, profits, analysis 3529, 7016
  Populus, forest resources, USA 813
  prices, *Quercus petraea,* Germany, growth effects 4589
  private forestry
    Austria 263
    conferences 773
    employment, Canada, subsidies 9644
    Finland 5215
    forest management, USA 210
    Netherlands, profitability 1051
    prices, USA, analysis, methodology 1054
    surveys, UK 4462
    Sweden 5215
    USA, income tax 3530
  profitability
    Chamaecyparis obtusa, Japan, analysis 2783
    forest ownership, Germany 9655
    Quercus, pruning, USA 6363
    rain forests, deforestation, Tropics 8521
  Pseudotsuga menziesii, silviculture, USA, wood properties 5214
  Quercus suber, forest management, multiple use, Portugal 9257
  returns, *Juglans nigra,* forest plantations, USA 5212
  riparian forests, reclamation, USA, simulation 5850
  riparian vegetation, forest management, USA, simulation 3501
  risk assessment, Germany 4197
  road construction, planning, costs 9606
  rotations, forest management, theory 4994
  short rotation forestry
    energy resources, environmental factors, USA, techniques 6100
    Italy 9486
  stumpage value
    Costa Rica, discount rates, cash flow 9654
    Poland, equations 1869
  Swietenia macrophylla, logging, deforestation, Amazonia 7568
  taxes, France, inheritance tax 9645
  Tectona grandis
    forest management, planning, India 2786
    forest plantations, increment, Indonesia 6188
  theory, valuation, analysis 7858
  thinning
    decision making, equations 1871
    stand characteristics, decision making 9524
  Tsuga heterophylla, air pollution, Canada, growth 4557
  valuation
    estimation
      income, returns 9646
      methodology, France, *Pseudotsuga menziesii* 7020
    forest management, planning, USA, non-market benefits 5192

- **Forest economics** *cont.*
  - valuation *cont.*
    - Italy, history 6246
- **Forest fires** (*see also* Controlled burning)
  - *Abies lasiocarpa,* natural regeneration, climate, USA 1416
  - *Acacia mangium,* forest plantations, grasslands, Indonesia 1996
  - air pollution, Tropics, emission 385
  - *Allosyncarpia ternata,* mortality, rain forests, Australia 3113
  - atmosphere 366
  - Australia, equations 8028
  - *Banksia,* stand characteristics, plant water relations, Australia 6577
  - birds
    - *Dendroica kirtlandii, Pinus banksiana,* USA 3218
    - *Pinus clausa,* clear felling, USA 9213
  - boreal forests
    - global warming, carbon cycle 7275
    - natural regeneration, Russia, simulation 9965
    - remote sensing, radiometry, USA 5202
  - broadleaved evergreen forests, wind, South Africa 2134
  - broadleaves, forest ecology, simulation 2920
  - carbon dioxide enrichment, Portugal, forecasting 3540
  - cerrado, biomass, nutrients, Brazil 527
  - *Chamaecyparis thyoides*
    - microrelief, wetlands, USA 7875
    - pollen analysis, wetlands, plant succession, USA 3877
  - conferences 2470
  - coniferous forests
    - botanical composition, USA 3933
    - plant succession, USA 7136
  - conifers
    - natural regeneration
      - age of trees, Sweden, history 3064
      - Canada 8882
    - soil chemistry, USA 2918
  - damage, fire behaviour, USA, statistical analysis 6381
  - ecology 9318
  - environmental impact, Sicily 6377
  - erosion, Israel 8885
  - *Eucalyptus*
    - Australia, damage 2919
    - simulation, Australia 4608
  - *Eucalyptus marginata,* dendrochronology, Australia 8463
  - *Eucalyptus regnans,* soil properties, Australia 7137
  - *Ficus,* natural regeneration 6524
  - fire behaviour
    - fuels, wind damage, USA 2912
    - Italy, simulation 364
    - simulation, Canada 8877
    - subalpine forests, Canada, simulation, prediction 6375
    - wind speed, mathematics 368
  - fire danger
    - assessment, Russia 9769
    - Australia, fire weather 1999
    - boreal forests, ground vegetation, Canada 9770
    - chaparral, remote sensing, USA 2913
    - classification, remote sensing, mapping, Canada 8731
    - computer techniques 1998
    - estimation, simulation, Australia 4607
    - fire weather, Switzerland 370
    - fuels
      - height, forest plantations, Canada 6957
      - moisture, forest litter, Australia 372
      - *Populus,* soil water, Canada 8030
    - Italy
      - assessment 371
      - economics 6373
    - Korea Republic, estimation 8878
    - mallee, Australia 373
    - *Pinus ponderosa,* USA, fuels, sampling 1191
- **Forest fires** *cont.*
  - fire danger *cont.*
    - remote sensing, evapotranspiration, France 244
    - understorey, energy value, seasonal variation, Spain 9773
  - fire detection
    - Italy, planning 376
    - microlight aircraft, Russia 5361
  - fire ecology
    - *Callitris intratropica,* natural regeneration, Australia 2005
    - *Pinus,* seed germination, Mediterranean Region 8947
    - rodents, *Pinus halepensis,* Israel 1196
    - shrubs, shoots, plant physiology, Spain 9775
  - fire effects
    - fire weather, simulation 2924
    - *Hakea,* seeds, mortality, Australia 2917
    - *Pinus contorta*
      - cones, natural regeneration, USA 1200
      - natural regeneration, landscape ecology, USA 1200
    - *Pinus halepensis,* synecology, Israel 1199
    - *Pinus pinaster,* soil chemistry, Spain 8035
  - fire prevention
    - land use planning, France, Mediterranean Region, books 7621
    - meteorological factors, Italy 6374
    - vegetation, surveys, Italy 8876
  - fire resistance, forest trees, bark, thickness, USA 1197
  - fire suppression
    - equipment, Russia 4609
    - fire engines 8031
    - firebreaks, mathematical models 375
    - forests, landscape, USA, settlement 383
    - landscape ecology, simulation, USA 4131
    - planning, Russia 9771
    - retardants, rheological properties 1194
    - simulation, USA, costs 2001
  - fire weather, precipitation, Portugal 1192
  - firebreaks
    - *Larix gmelinii,* Russia, silviculture 2914
    - maintenance 8879
  - forest ecology, simulation 7139
  - forest inventories, damage, defoliation, drought, Spain 7816
  - forest litter, streams, USA 4498
  - forest resources, Greece, damage 4614
  - forest trees
    - Finland, mortality 8032
    - forest litter, cellulose, decomposition, Portugal 7140
    - treelines, global warming, Canada 3700
  - frequency
    - boreal forests, old-growth forests, landscape ecology 10137
    - dendrochronology, *Quercus stellata,* USA 8029
  - gunfire and bomb damage, history, Germany 9381
  - heathlands, plant competition, simulation, Australia 3698
  - history
    - boreal forests, Russia 8027
    - North America, sediment, analysis 3701
    - vegetation types, USA, mountain areas 7131
  - insect pests
    - *Perthida glyphopa, Eucalyptus marginata,* Australia 6653
    - Saturniidae, broadleaves, Malawi 7452
  - *Libocedrus decurrens,* mycorrhizas, soil fungi, erosion, USA 2243
  - logging, natural regeneration, Ghana 8881
  - marsupials, *Gymnobelideus leadbeateri,* Australia, simulation models 9225
  - Mediterranean Region 365
- **Forest fires** *cont.*
  - mixed forests
    - forest ecology, South America 2916
    - forest litter, USA 2923
  - mortality, forest trees, simulation, USA 380
  - mycorrhizas, ecology, *Pinus banksiana,* Canada 7394
  - Myrtaceae, seeds, Australia, insulation 2100
  - national parks, USA, damage, effects 7141
  - natural regeneration, Spain, indicator species, small mammals 2393
  - *Picea,* boreal forests, plant succession, Canada 9949
  - *Picea abies,* plant succession, Slovenia 5459
  - *Pinus*
    - agroforestry, amenity forests, management, France 5877
    - natural regeneration, soil chemistry, USA 381
    - seed germination
      - Spain 5364
      - temperature, simulation 9774
  - *Pinus banksiana,* natural regeneration, wood ash, Canada 1198
  - *Pinus clausa,* natural regeneration, logging, USA 5469
  - *Pinus contorta*
    - bark, feeding behaviour, *Cervus elaphus* 3200
    - stand structure, USA 4809
  - *Pinus halepensis*
    - natural regeneration, forest management, Israel 9777
    - remote sensing, Spain 3696
  - *Pinus palustris,* seedlings, USA, mortality, stand density 4754
  - *Pinus ponderosa,* nitrogen cycle, USA, monoterpenes 3636
  - *Pinus radiata,* simulation, Australia 4608
  - *Pinus resinosa*
    - autecology, North America 506
    - roots, development, Canada 3866
    - seed germination, seedling growth, Canada 3866
  - pollution, fallout, Russia, Ukraine, Belarus 9736
  - *Pseudotsuga menziesii*
    - mycorrhizas, soil fungi, erosion, USA 2243
    - stand development, USA 379
  - *Quercus,* arthropods, ecology, USA 2004
  - *Quercus coccifera*
    - broadleaved evergreen forests, Greece, fire ecology 9000
    - cycling, France 4612
    - maquis, grazing, Greece 683
    - simulation, Portugal 7133
  - *Quercus coccinea,* garrigue, simulation, France 2921
  - *Quercus suber,* agroforestry, amenity forests, management, France 5877
  - rain forests
    - clearing, carbon dioxide enrichment, Brazil 9776
    - climate, storms, Australia 7256
  - rangelands, weed control, grazing 7510
  - remote sensing
    - expert systems 8512
    - mapping, USA 4450
    - satellites, radiometry, Australia 7848
    - thematic mapper, image processing, Spain 7847
  - research, USA, history 2532
  - savannas
    - climate, storms, Australia 7256
    - cycling, Australia 2003
  - sclerophyllous forests, weeds, invasion, Australia 8886
  - sclerophyllous scrub
    - botanical composition, Australia 7138
    - forest ecology, invertebrates, Australia 8324
    - soil temperature, seed germination, Australia 8036
  - shrubs, simulation, Portugal 7132
  - soil chemistry, nutrients, leaching 384
  - soil properties, India 6379

Forest fires *cont.*
- Spain
  - Bryophyta, plant succession 1195
  - simulation 8034
- spread
  - fire suppression, Russia 9772
  - statistical analysis 367
- statistics, Canada, costs, analysis 4606
- streams
  - aquatic invertebrates, USA 8033
  - erosion, Canada, sediment yield 8884
- subalpine forests, avalanches, Canada 1997
- tropical forests, natural regeneration, Brazil 377
- urban forestry, USA, planning, control 2915
- vegetation types, synecology, altitude, USA 3053
- vertebrates, vegetation types, Canada 9220
- wetlands, USA 369
- wood ash
  - *Cistus,* seed germination, seedling growth 382
  - *Pinus halepensis,* seed germination, seedling growth 382
- Yugoslavia 365

Forest fragmentation
- birds
  - *Aimophila aestivalis,* USA, population ecology 9217
  - species diversity, USA 10075
  - USA 9211
- deciduous forests, Japan, forest ecology, *Bombus,* population dynamics 9947
- *Eucalyptus regnans*
  - Australia
    - *Trichosurus caninus*
      - population dynamics 8363
      - population genetics 8364
      - simulation 8363-8364
- forest trees, landscape, USA 7280
- landscape ecology, virgin forests, USA 1587
- primates, conservation, Brazil 9295
- *Quercus serrata,* coppice, biodiversity, Japan 8403
- rain forests
  - biodiversity, mammals, Mexico 9205
  - synecology
    - nature conservation, Australia 10129
    - species diversity, China 8984
- remote sensing, USA 6998
- seed dispersal, simulation 9886
- species diversity
  - Estonia, models 8154
  - Finland, models 8154
  - Lithuania, models 8154
- synecology, endangered species, Australia 10128

Forest health (*see also* agency concerned, e.g. Air pollution; Fungal diseases; Insect pests)
- acid deposition, Canada 9739
- air pollution, ground vegetation, synecology, synecology, Czechoslovakia 339
- assessment, techniques, variation, Switzerland 8118
- broadleaves, stress factors, Netherlands 1296
- coniferous forests, Norway, regions, variation 9859
- conifers, air pollution, France, history 3673
- Europe, assessment, sampling 1303
- expert systems 36
- forest decline, France, monitoring 3818
- forest inventories
  - Austria 4434
  - remote sensing, Switzerland 4438
  - sampling, Switzerland 9624
- forest trees, UK, forest decline 6501
- fungal diseases, France 6845
- geographical information systems, UK 8938
- insect pests
  - France 6845
  - Romania, damage, control 8524

Forest health *cont.*
- Italy, monitoring 5978
- *Larix sukaczewii,* Russia, experimental plots 5419
- mixed forests
  - silviculture 5049
    - France 6864
- monitoring
  - boreal forests, Canada 9866
  - methodology, reviews 6812
- *Picea abies,* foliage, shedding, Germany, methodology 3319
- *Pinus sylvestris*
  - air pollution, Russia, Finland, monitoring 9858
  - foliage, shedding, UK 1301
- *Quercus,* Belgium, monitoring 8940
- research, Switzerland 1302
- sampling
  - forest inventories, wildlife, USA 5004
  - France, monitoring 6994
- surveys, Italy 4718
- USA 2524, 2729

Forest influences
- *Acacia mangium,* hydrology, watersheds, Sabah 2908-2909
- *Acacia tortilis*
  - canopy, Kenya, understorey, grasslands 4601
  - stand structure, soil chemistry, Sudan 4598
- acid deposition, water pollution, surveys, UK, simulation 3677
- afforestation
  - projects, carbon cycle, atmosphere, World 8013
  - streams, chemistry, soil chemistry, UK 10083
- aggregates, soil biology, microorganisms, India 8803
- air
  - carbon dioxide, swamps, USA, emission 362
  - *Fagus sylvatica,* Germany, monoterpenes, diurnal variation 1186
  - methane
    - swamps, USA, emission 362
    - wetlands, Canada 361
  - mixed forests, air pollution, France, monoterpenes 1187
  - *Picea abies,* Germany, monoterpenes, diurnal variation 1186
  - *Pseudotsuga menziesii,* canopy, Netherlands 2904
- air pollution, ozone, India 9760
- atmosphere
  - afforestation, forest management 1188
  - *Eucalyptus,* air pollution, Portugal, measurement 8499
  - isoprenoids
    - emission
      - mixed forests
        - simulation 8011
        - USA 8011
      - *Quercus rubra,* USA 8010
  - methodology, deciduous forests, canopy, Canada 9763
  - mixed forests, carbon cycle, USA 5356
  - *Pinus wallichiana,* India, terpenoids 266
  - precipitation
    - India, simulation 9759
    - Tropics, simulation 9759
  - silviculture, carbon cycle, Norway, simulation 2901
- birds, *Falco columbarius,* UK 5825
- broadleaves
  - atmosphere, Austria, volatile compounds 8015
  - soil chemistry, Belgium, site factors, classification 8999
  - soil fertility, savannas, Zimbabwe 6369
  - soil properties, Nigeria, land use 8024
- carbon dioxide, forest trees, plant physiology, Japan 7025
- carbon dioxide enrichment 1990
  - energy resources, reviews 7130
  - Switzerland 355

Forest influences *cont.*
- *Ceanothus velutinus,* soil chemistry, USA 8780
- *Chamaecyparis obtusa*
  - evapotranspiration, microclimate, Japan 1117
  - microclimate, Japan 1189
  - soil fauna, arthropods, Japan 9714
  - understorey, soil morphology, crusts, Japan 9762
- clear felling, pollution, heavy metals, Norway 8019
- conifers, nutrients, distribution, Sweden 7129
- *Cryptomeria japonica,* carbon cycle, soil chemistry, Japan 7047
- *Cunninghamia lanceolata,* soil, nutrients, China 8017
- cycling, sulfur, watersheds 1950
- *Dalbergia sissoo,* forest plantations, soil properties, India 1993
- drought, deforestation, India 7869
- *Eucalyptus*
  - forest plantations, soil properties, Australia 1185
  - soil toxicity, Australia 5354
- *Eucalyptus camaldulensis,* provenance trials, soil chemistry, India 66
- Europe, silviculture 7130
- *Faidherbia albida,* soil fertility, Niger 1919
- forest litter, decomposition, soil chemistry, Portugal 8026
- forest management, conferences, monitoring 1607
- forest plantations
  - soil chemistry, lateritic soils, India 8023
  - soil properties, reviews 1185
- forest trees
  - roadside plantations, air pollution, Japan 7126
  - soil chemistry, USA 5360
  - streams, Japan, chemistry 4599
- ground vegetation, nature conservation, Germany, weeds, fields 4964
- hydrology
  - carbon dioxide, swamps, USA, emission 362
  - conferences 15
  - erosion, research, Thailand 358
  - methane, swamps, USA, emission 362
  - precipitation, runoff, Japan, statistics 7550
  - watersheds, Brazil, research projects 9237
- *Juniperus occidentalis,* soil chemistry, nutrients, USA 6372
- *Juniperus pinchotii,* ground vegetation, soil types, USA 6556
- *Larix sibirica,* soil chemistry, USA 8791
- mangrove forests, soil properties, variation, Nigeria 8022
- *Picea,* throughfall, isotopes, USA 7124
- *Picea abies*
  - afforestation, agricultural land, soil morphology, Denmark 5351
  - forest economics, peatlands, carbon cycle, Norway 2784
  - forest plantations
    - soil properties
      - Europe 1185
      - France 1994
  - soil organic matter, France 3688
- *Picea sitchensis*
  - forest plantations, soil chemistry, UK 360
  - streams, chemistry, acid deposition, UK 8868
- *Pinus densiflora,* soil fauna, arthropods, Japan 9714
- *Pinus jeffreyi,* soil chemistry, USA 8780
- *Pinus pinea,* volatile compounds 8865
- *Pinus radiata*
  - acid deposition, Spain 3671
  - forest plantations
    - soil properties
      - Australia 1185
      - Chile 1185
      - New Zealand 1185

Forest influences *cont.*
- *Pinus radiata cont.*
  - hydrology, watersheds, New Zealand 2910
  - soil properties, New Zealand 8021
- *Pinus sylvestris*
  - forest economics, peatlands, carbon cycle, Norway 2784
  - forest plantations, soil properties, Europe 1185
  - understorey, air pollution, Russia 341
- *Pinus taeda,* cycling, USA 5355
- pollution, fallout, forestry workers, Russia, Ukraine 8829
- *Populus canadensis,* water pollution, riparian vegetation 3692
- *Populus deltoides,* soil chemistry, USA 8791
- precipitation, throughfall, India 9761
- *Quassia simarouba,* sex, soil chemistry, phosphorus, Costa Rica 5350
- *Quercus*
  - air pollution, methane, USA 5359
  - soil fauna, arthropods, Japan 9714
- *Quercus emoryi,* understorey, USA 1184
- rain forests
  - soil air, Costa Rica, nitric oxide 8873
  - soil chemistry, Australia 5248
  - soil water balance, Brazil 8871
- riparian forests, water quality, environmental degradation, USA 5346
- riparian vegetation, natural regeneration, streams, USA 2170
- snow, evaporation, Germany 4933
- soil temperature, Japan, urban areas 357
- streams, nitrogen, UK 8025
- throughfall, forest trees, USA 2903
- treelines, energy balance, Canada 3693
- urban forestry 1588
- watersheds
  - hydrology
    - Finland 5836
    - Slovakia, simulation 5835
    - streams, UK 2906
    - Sweden 5836
    - USA 3685
  - runoff
    - Malawi, simulation 8870
    - Sri Lanka 2399
- wind, simulation 3339

Forest inventories (*see also* Regeneration surveys)
- area, estimation 5016
- books 3298
- boreal forests, remote sensing, satellites, Sweden 7006
- Brazil 2750
- computer techniques, Switzerland 6835
- damage, defoliation, drought, forest fires, Spain 7816
- data collection
  - Canada
    - equipment, computer techniques 1024
    - methodology 6814
- data processing, diameter, growth models, Sweden 9599
- equipment
  - computers 9337
  - lasers 1852, 4448
- *Fagus sylvatica,* remote sensing, volume determination, Austria 6216
- forest decline
  - Italy 3026
  - Switzerland 4721
- forest health
  - Austria 4434
  - sampling, Switzerland 9624
- forest management
  - decision making, statistical analysis 2726
  - Germany 9627
  - stumpage value, Sweden, economic evaluation 3504
- forest ownership
  - geographical information systems, USA 6234
  - USA 3351
- forest resources, Finland 5027
- forest trees, height, estimation, South Africa, equations 212

Forest inventories *cont.*
- geographical information systems, forest pests, mapping 9632
- Germany 4439
- glossaries, German, Russian 4167
- grading, trees, USA 1815
- growing stock, Germany 4435
- growth models, evaluation 6215
- guidelines 1850
- increment
  - Switzerland 6220
  - volume, Germany 1000
- information processing, computer techniques, Japan 6993
- Italy 9626
- mapping, Canada, production 6995
- maps, USA 1022
- national parks, Vietnam, botanical composition, stand structure 7604
- nature conservation, projects, Kenya 2735-2749
- old-growth forests, Canada 6543
- *Pinus pinaster,* stand characteristics, sampling, France 4433
- *Pinus strobus,* volume, Canada 4383
- *Pinus sylvestris,* volume determination, equations, Finland 7814
- *Pinus taeda,* growth models, assessment, monitoring 6192
- remote sensing
  - Australia, economic evaluation 6999
  - broadleaved evergreen forests, Chile 2751
  - forest health, Switzerland 4438
  - geographical information systems, Belgium, stand characteristics 259
  - image interpretation, Canada 243
  - increment, Sweden 7008
  - multispectral imagery, Spain 6228
  - satellites
    - books 6768
    - France, methodology, testing 4449
- sample plot technique
  - Germany 1023
  - growth models, methodology 3338
- sampling 1026, 2733-2734, 5197
  - Belgium, methodology 4432
  - canes and rattans, Indonesia 1847-1849
  - conferences 6809
  - cost analysis, Switzerland 6219
  - errors, estimation, Finland, models 9353
  - forest decline, Germany 9628
  - forest health, wildlife, USA 5004
  - forest management, planning 7673
  - Germany, statistical analysis 1020
  - increment, estimation 6213
  - methodology, testing 3506
  - simulation, regression analysis 5959
  - stand structure, volume determination 9625
  - statistical analysis 1021, 4436
    - Switzerland 7836
  - Sweden, methodology 6212
  - Switzerland 242
    - growth, yield forecasting 6211
  - techniques 1027
  - theory 6218
  - USA, methodology 4431
- site types, USA, statistical analysis 2727
- South Africa 240
- stand characteristics, simulation, statistical analysis, Finland 5198
- stand tables, statistical analysis 6217
- tropical forests
  - sample plot technique 3507
  - understorey, Ghana, surveys, techniques 4441
- USA 2731
  - forest management 2732
  - logging, regeneration 3503
  - mathematics 1025
  - measurement, errors 4437
- valuation, remote sensing, satellites, Sweden 5216
- yield forecasting, conferences 5939

Forest litter (*see also* Humus)
- *Acer pseudoplatanus,* air pollution, UK, decomposition 4572

Forest litter *cont.*
- *Acer saccharum,* mycorrhizas, seedlings, soil arthropods, pot experimentation 8262
- *Acioa barteri,* fallow, cycling, Nigeria, nutrients 2818
- analysis, sampling, tropical forests, palaeoecology, Peru 3887
- *Atherosperma moschatum,* streams, rain forests, Australia 7896
- *Betula pendula,* soil biology, soil chemistry, heavy metals, Finland 7934
- biomass, *Fagus sylvatica,* Austria 227
- broadleaves
  - aspect, soil chemistry, Australia 2817
  - cycling
    - Japan, seasonal variation 7894
    - Sweden 2820
  - evaporation, Japan, simulation 4491
  - India 3582
  - soil fauna, USA 1924
  - soil organic matter, carbon cycle, France, measurement 5240
  - streams, UK, fauna 5252
- *Casuarina equisetifolia,* Senegal, measurement 6283
- cellulose
  - decomposition
    - forest trees
      - controlled burning, Portugal 7140
      - forest fires, Portugal 7140
- chemistry, decomposition, rain forests, Nigeria 3578
- classification, *Picea,* Russia 7916
- conifers, respiration, USA 4496
- *Cupressus macrocarpa,* water pollution, reservoirs, Australia 5352
- cycling
  - roots, biomass production, estimation 321
  - wind damage, Puerto Rico 1067
- dead wood
  - decomposition, mixed forests, USA 3587
  - *Pinus,* arthropods, ecology, Australia 2297
- decay fungi, *Resinicium bicolor,* biology 9715
- deciduous forests
  - Basidiomycotina, cycling, UK 9713
  - plant succession, USA 1911
  - *Quercus,* UK 7904
- decomposition
  - *Abies amabilis,* volcanic ash, USA 1098
  - *Acer pseudoplatanus,* carbon dioxide enrichment, laboratory tests 5255
  - *Acer saccharum,* fertilizers, Canada 885
  - *Betula pendula,* carbon dioxide enrichment, plant nutrition, nitrogen 7900
  - broadleaved evergreen forests, China 1914
  - broadleaves
    - air pollution, USA 6344
    - drought, Panama 1916
    - Germany 1915
    - India 1917
    - soil organic matter, Congo 1912
    - USA 3584
    - vegetation types, Canada 4493
  - carbon-nitrogen ratio, *Betula* 8790
  - *Chamaecyparis obtusa,* soil fauna, Japan 6282
  - chemistry
    - *Picea abies,* fertilizers, Sweden 3580
    - *Picea rubens,* coniferous forests, USA 299
  - climate, reviews 3583
  - coniferous forests, soil organic matter, simulation 6285
  - conifers
    - hydrology, USA 7897
    - nitrogen, mineralization, Canada 6288
    - soil biology, Collembola, Japan 8799

- **Forest litter** *cont.*
  - decomposition *cont.*
    - deciduous forests
      - *Quercus,* UK 7905
      - roots, USA 2824
    - enzymes, broadleaves, streams, USA 8781
    - *Eucalyptus tereticornis,* sandy loam soils, laboratory tests 5264
    - *Fagus sylvatica*
      - climax communities, Spain 7915
      - Germany
        - branches, roots 2825
        - temperature 7907
      - soil biology, Germany 7910
    - fauna, *Quercus suber,* France 7930
    - forest influences, soil chemistry, Portugal 8026
    - forest trees
      - allelopathy, plant composition, Spain 7315
      - Canada, nitrogen, availability 7912
      - chemical composition 295
      - Poland, chemistry 7901
      - Spain 9699
        - phytotoxicity 7313
      - Sweden 6281
      - USA 9703
    - *Fraxinus excelsior*
      - carbon dioxide enrichment, laboratory tests 5255
      - Germany, branches, roots 2825
    - fungi
      - *Alnus glutinosa,* Germany 8784
      - *Paraserianthes falcataria,* India 2822
      - *Tectona grandis,* India 2822
    - *Leucaena leucocephala,* soil chemistry, Indonesia 1908
    - Mediterranean Region, leaching 7916
    - *Metrosideros polymorpha*
      - soil chemistry, phosphorus, USA 7882
      - USA, site factors 4492
    - microorganisms, forest trees, Canada 5263
    - mycorrhizas, *Pseudotsuga menziesii* 4005
    - nitrogen, release, *Pinus muricata,* USA 9705
    - *Nothofagus,* New Zealand 4499
    - nutrients
      - heavy metals, Sweden 9700
      - *Picea abies,* soil biology, Denmark 5256
      - *Quercus pyrenaica,* Spain 6291
    - phenolic compounds
      - *Picea abies,* France 5259
      - *Vaccinium myrtillus,* France 5259
    - *Picea glauca,* soil chemistry, USA 7903
    - *Picea sitchensis*
      - carbon dioxide enrichment
        - laboratory tests 5255
        - plant nutrition, nitrogen 7900
    - *Pinus contorta,* Sweden, mathematical models 9701
    - *Pinus pinaster,* soil organic matter, lipids, France 1913
    - *Pinus radiata,* clear felling, cycling, Spain 5251
    - *Pinus sylvestris*
      - air pollution, Poland 7050
      - carbon, nitrogen, mineralization 6284
      - forest plantations, Spain 7915
      - fungi, Germany, ecology 3143
      - site factors, climate, Sweden 4495
      - Sweden, mathematical models 9701
    - *Populus deltoides,* sandy loam soils, laboratory tests 5264
    - *Prunus serotina,* streams, USA 7898
    - *Pseudotsuga menziesii,* volcanic ash, USA 1099
    - *Quercus,* Spain 7909
    - *Quercus ilex,* soil pollution, heavy metals, Italy 7908
    - *Quercus semecarpifolia,* India 8782
    - riparian forests, streams, USA 5253
- **Forest litter** *cont.*
  - decomposition *cont.*
    - sclerophyllous forests, Australia 7051
    - *Taxodium distichum,* swamps, USA 3579
    - woody plants, vegetation types, Spain 2821
  - degradation, crabs, *Sesarma meinerti,* mangroves, South Africa 1523
  - *Elaeagnus angustifolia,* allelopathy, soil, nitrification 1897
  - *Eucalyptus globulus*
    - cycling, Portugal 7913
    - extracts, acidity, chelation, metal ions 8788
  - *Fagus sylvatica*
    - plant succession, fields, Germany 2825
    - soil chemistry, Collembola, Austria 4504
  - foliage
    - fungi, *Eucalyptus,* Madagascar 7403
    - measurement
      - *Pinus sylvestris*
        - biomass production
          - Europe 7902
          - Spain 7902
        - climate
          - Europe 7902
          - Spain 7902
  - forest ecology, soil fauna, Formicidae, Costa Rica 5676
  - forest fires, streams, USA 4498
  - forest trees
    - soil organic matter, USA, nitrogen, mineralization 5254
    - Sweden, chemical composition 4494
  - forests, cycling, soil chemistry, Tropics 3634
  - fungi, crystals, *Quercus,* USA 8251
  - humus
    - mineralization, conifers, fertilizers, Canada 6289
    - *Picea abies,* soil biology, altitude, France 3588
  - *Ilex chinensis,* nitrogen fixation, Japan 1943
  - Isoptera, Amazonia 5678
  - leaching, *Pinus radiata,* Spain 7911
  - logs
    - decomposition
      - *Cyrilla racemiflora,* Puerto Rico 2819
      - *Pinus contorta,* cycling, USA 2826
    - dendrochronology, Canada, dispersal 5913
  - mangrove forests, biomass production, latitude, Tropics 3899
  - marine fungi
    - *Halophytophthora*
      - mangrove forests, Bahamas 9066
      - salt marshes, USA 9066
  - measurement
    - *Cavanillesia platanifolia,* secondary forests, phenology, Colombia 1205
    - deciduous forests, Mexico 293
    - decomposition
      - fungi, *Pinus,* South Africa 294
      - nutrients
        - *Bombax malabaricum,* India 3586
        - *Dalbergia sissoo,* India 3586
        - *Vaccinium myrtillus,* Sweden 9702
    - mangroves
      - *Aegiceras corniculatum,* phenology, Australia 3704
      - *Avicennia marina,* phenology, Australia 3704
    - *Paraserianthes falcataria,* forest plantations, Philippines 1910
    - rain forests
      - age, Peru 6286
      - species diversity, Sabah 2823
    - seasonal variation
      - *Bruguiera gymnorrhiza,* mangrove forests, India 297
      - *Nothofagus,* New Zealand 298
  - mixed forests, forest fires, USA 2923
- **Forest litter** *cont.*
  - mycorrhizas, *Pseudotsuga menziesii,* USA 5567
  - *Nothofagus pumilio,* Chile 1101
  - nutrients
    - *Bambusa bambos,* plantations, India 9704
    - forest trees, soil properties, Denmark 7962
  - *Picea abies,* fertilizers, ground vegetation, Austria 4304
  - *Pinus elliottii,* phosphorus fertilizers, South Africa 9466
  - *Pinus patula,* forest plantations, rotations, Swaziland 7895
  - *Pinus radiata,* soil fertility, plant composition, Australia 5117, 5268
  - *Pinus strobus,* Japan, leaf fall, seasonal behaviour 7899
  - *Pinus taeda,* natural regeneration, soil properties, USA 9912
  - planting stock, roots, Canada, morphology 6900
  - pollution, radionuclides, fallout, Poland 5306
  - *Populus canadensis,* forest plantations, biomass production, increment, Pakistan 9591
  - *Populus deltoides,* biomass, nutrients, India 1942
  - *Populus tremuloides,* natural regeneration, site preparation, Canada 3434
  - *Pseudotsuga menziesii*
    - branches, stand density, USA 4500
    - soil chemistry, nitrogen, Canada 9706
  - *Quercus pyrenaica,* biomass production, stand density, climate, Spain 1824
  - *Quercus robur,* extracts, acidity, chelation, metal ions 8788
  - *Quercus suber,* biomass, cork, increment, Spain 1825
  - rain forests
    - cycling, Brazil 296
    - soil chemistry, hurricanes, Puerto Rico 6292
  - respiration
    - forests, India 6294
    - nutrients, air pollution, heavy metals, Poland 8798
  - riparian forests
    - Brazil, sediment 1100
    - stand structure, Argentina 3081
  - seedlings, wind damage, Puerto Rico, botanical composition 1077
  - soil water movement, measurement, techniques 7881
  - streams, USA 6290
  - woodlands, soil chemistry, Israel 5257
- **Forest management** (*see also* Working plans; Yield regulation)
  - *Abies religiosa,* nature conservation, rural economy, simulation, Mexico 3280
  - afforestation
    - forest influences, atmosphere 1188
    - land use, UK 6204
  - *Araucaria cunninghamii*
    - gully erosion, Australia, classification 7551
    - hydrology, Australia 7547
  - Arecaceae, forest resources, resource utilization, forest ownership, Nigeria 7700
  - *Aspidosperma quebracho-blanco,* silviculture, grazing, Argentina 1504
  - attitudes, private forestry, USA 7703
  - biodiversity
    - France 9611
    - India 4975
    - nature conservation 4968
      - Cameroon 6196
      - Mediterranean Region, reviews 8438
      - UK 4998
      - USA, reviews 8438
    - reviews 1814
    - Tropics 4975
  - birds
    - *Aimophila aestivalis*
      - endangered species, USA 5817
      - *Pinus taeda,* USA, simulation 6990

Forest management *cont.*
- birds *cont.*
  - *Calyptorhynchus funereus, Eucalyptus regnans,* Australia 4066
  - cavities in trees, reviews 1526
  - *Dacrydium cupressinum*
    - clear felling, New Zealand 1507
    - selective felling, New Zealand 1508
  - *Pinus echinata,* USA 4071
  - *Tetrao urogallus,* UK 4929
- boreal forests
  - environmental impact, assessment, Canada 9622
  - forest ecology, Canada 4427
  - forest resources 1372
  - landscape, Russia 5195
  - nature conservation, biodiversity, Scandinavia 3278
  - wildlife, nature conservation, Canada 3500
- bottomland forests
  - hydrology, Slovakia 5832
  - non-wood forest products, Brazil 5188
- broadleaved evergreen forests, plant competition, increment, South Africa 223
- canes and rattans, *Calamus edulis,* protection of forests, Indonesia 7803
- carbon cycle, climatic change, carbon dioxide enrichment, research, reviews 4533
- community forestry
  - Canada 6738-6740
  - Developing Countries 6741
  - development projects
    - Nepal 8729
    - Tanzania 1570
  - India 9292
  - Nepal 9291
  - resource management, Tropics, bibliographies 6795
  - Senegal 9294
- computer techniques, information systems, Switzerland 34
- conifers, forest decline, France 3822
- conservation, legislation, India, tribal society, right of access 5993
- controlled burning
  - fire ecology, Australia, reviews 3697
  - silviculture, Canada 2002
- coppice, Italy, multiple use 8724
- Côte d'Ivoire, organizations 8721
- cycling, plant nutrition 7954
- decision making
  - birds, *Tetrao tetrix,* simulation 9200
  - bottomland forests, simulation, USA 5213
  - Canada, investment 238
  - computer techniques, mathematics 1623
  - forest economics, simulation, Finland 7829
  - forest inventories, statistical analysis 2726
  - geographical information systems, expert systems 1622
  - insect pests, *Dendroctonus rufipennis,* North America, risk 4892
  - logging, statistical analysis 1019
  - participation, Finland 4430
  - *Pseudotsuga menziesii*
    - Canada, computer techniques 1623
    - USA, computer techniques 1623
  - risk, simulation 3334
  - thinning, forest economics, equations 1871
  - valuation, Australia 7017
- deer
  - *Odocoileus hemionus*
    - hunting, USA 10065
    - logging, Canada 239
- deforestation, rural women, sustainability, Sri Lanka 4105
- *Detarium microcarpum,* natural regeneration, development projects, Burkina Faso 8538
- development projects, economics, community forestry, Peru 8545

Forest management *cont.*
- economics
  - Czech Republic, textbooks 10
  - damage, decision making 1056
  - forest policy, legislation, forest administration, Russia 9386
  - Slovakia, textbooks 10
- education, France 9403
- efficiency, analysis, Taiwan 3492
- *Eucalyptus,* nature conservation, Australia 5194
- *Eucalyptus microcorys,* nature conservation, Australia 1580
- *Fagus sylvatica,* forest decline, France 3821
- finance, Russia 5041
- forest decline
  - France, insect pests, fungal diseases, interactions 3819
  - Kazakhstan 8945
- forest ecology, France 8717
- forest economics
  - France, investment 2785
  - methodology 234
  - private forestry, Netherlands, methodology 265
  - simulation, Developing Countries 3532
  - Sweden, simulation 3527
  - USA, stand structure 772
  - valuation, Sweden 1053
- forest influences, conferences, monitoring 1607
- forest inventories
  - Germany 9627
  - stumpage value, Sweden, economic evaluation 3504
- forest ownership
  - forest policy
    - Cameroon 8518
    - Thailand 8518
  - USA, opinions 1645
- forest pests, management, control, decision making 10053
- forest plantations, biodiversity, Mediterranean Region 2640
- forest policy
  - biodiversity, nature conservation, Sweden 9387
  - development projects, Africa South of Sahara 9395
  - forest economics, India 47
  - history, USA, national forests, books 5927
  - land use planning, Italy 6208
  - nature reserves, USA 4423
  - UK 8522
    - conferences 8482
  - USA 8539
- forest recreation, landscape, Denmark 1583
- forest resources
  - deforestation, land use, Chile 5989
  - forest policy, sustainability, models 5190
  - India, tribal society 7698
  - Italy 805
  - land use, Guinea 5033
  - mapping, India 3523
  - rural economy, cooperatives, Developing Countries 4463
  - sustainability, planning 8719
- forest trees, simulation 2513
- forestry
  - deforestation, Thailand, women, attitudes 8528
  - Guadeloupe, reviews 812
  - legislation, Spain 1636
  - Martinique, reviews 812
  - public opinion, USA 7701
  - social values, environment, USA 7704
- forestry development
  - agroforestry, Niger 811
  - sustainability, India 5030
  - vegetation types, Arid Regions, Africa 1011
- forests, land classification, Canada, forest ecology 251

Forest management *cont.*
- fungal diseases, *Phytophthora cinnamomi,* endangered species, Australia 7395
- geographical information systems, Japan, work planning 6195
- Germany 4424, 7827
- glossaries, German, Russian 4167
- growing stock, simulation, Netherlands 4429
- insect pests, *Dendroctonus frontalis,* USA 10056
- *Juniperus thurifera,* sustainability, Morocco 1015
- land classification
  - Canada 255, 257
    - information needs 254
  - USA, conferences 2469
- land use
  - forest products industries, Kenya, conflict 2718
  - mapping, forest ownership, Indonesia 2758
- landscape
  - USA 4133
    - public opinion 1646
- landscape ecology, biodiversity, USA 4130
- *Larix decidua,* forest resources, Italy, stand characteristics, landscape 9540
- logging
  - natural regeneration, Canada, decision making 4321
  - planning, Japan 4418
- mangrove forests, utilization, conservation, Indonesia 7019
- mangroves
  - St Lucia, charcoal 3085
  - synecology 5450
- marsupials
  - *Gymnobelideus leadbeateri, Eucalyptus,* wildlife conservation, Australia 9216
  - *Petauroides volans, Eucalyptus regnans,* Australia 1525
- mixed forests, remote sensing, thematic mapper, USA 7005
- mountain forests
  - forest economics 7856
  - soil types
    - Czech Republic, monographs 45
    - Slovakia, monographs 45
- multiple use 8723
  - coniferous forests, nature conservation, public opinion, Norway 9406
  - conifers, biodiversity, New Zealand 6744
  - forest economics, theory 2715-2716
  - forest plantations, New Zealand, attitudes 2539
  - forest policy, gender relations, India 4238
  - forest trees, New Zealand, attitudes 2539
  - Germany 9616
  - hunting, *Alces alces,* valuation, Canada 9219
  - landscape, books 8470
  - marsupials, *Gymnobelideus leadbeateri,* nature conservation, Australia 4967
  - Netherlands, simulation 4098
  - non-wood forest products, USA 5985
  - *Nothofagus,* nature conservation, New Zealand 6743
  - planning, simulation 1618
  - *Quercus suber,* forest economics, Portugal 9257
  - remote sensing, conferences 6809
  - riparian vegetation, forest economics, USA, simulation 3501
  - silviculture, leadership 3490
  - stand characteristics, theory 8722
  - surveying, conferences 6809
  - sustainability, Australia 6209
  - theory 6201
  - wildlife
    - birds, USA 8365
    - simulation, Australia 5020

Forest management *cont.*

- multiple use *cont.*
  - working plans, national parks, Germany 9618
- multispectral imagery, thematic mapper, USA 8733
- natural resources
  - genetic resources 9030
  - planning, uncertainty 8398
- nature conservation
  - conferences 8480
  - cost analysis, Germany 1582
  - Slovenia 2630
  - sustainability 8718
    - climatic change, land use, conferences 19
- New Zealand 5991
- participation
  - community forestry
    - India 3495, 3498, 6197, 6200
    - project appraisal, India 6198
    - projects, India 3497
    - research, requirements, India 3357
    - Sri Lanka 8529
    - training, India 3358
  - degraded forests, rehabilitation, community forestry, India 4121
  - planning, community forestry, India 3499
  - sociology, culture, India 7696
  - sustainability, community forestry, India 3348
- *Picea abies*
  - boreal forests, forest ecology, Sweden 10029
  - Sweden, simulation 2513
- *Pinus*
  - controlled burning, Canada 4610
  - wildlife, Canada 4906
- *Pinus elliottii,* USA, pulpwood 1784
- *Pinus halepensis,* forest fires, natural regeneration, Israel 9777
- *Pinus pinaster*
  - forest decline, France 3810
  - mixed forests, soil fertility, Spain 1190
- *Pinus ponderosa*
  - canopy gaps
    - forest pests, USA 8986
    - stand structure, USA 8666
- *Pinus radiata,* growth models, New Zealand, development 4225
- *Pinus resinosa,* yield forecasting, USA, sustainability 2523
- *Pinus roxburghii,* India 2719
- *Pinus strobus*
  - logging, Canada 4420
  - plant genetic resources, conservation 4815
- *Pinus sylvestris,* site class assessment, Ukraine 5185
- *Pinus taeda*
  - understorey, species diversity, USA 1765
  - USA, pulpwood 1784
- planning
  - biodiversity, conservation, Finland 2722
  - bottomland forests, Austria 9936
  - Canada, data analysis 2498
  - community forestry, India 3496
  - computer techniques, USA 3349
  - decision making
    - forest economics, simulation, Denmark 9623
    - Italy, research 8725
  - forest economics, simulation 4426
  - forest inventories, sampling 7673
  - forest policy, UK 2714
  - forest recreation
    - Japan 5193
    - USA 4425
  - forest trees, wood properties, choice of species, Venezuela 6025
  - forests, ecotypes, regionalization, Poland 7285
  - Germany, books 4164
  - harvesting, subalpine forests, Sweden, simulation 9605
  - history, maps, Germany 9614

Forest management *cont.*

- planning *cont.*
  - logging, mathematics, geographical information systems, methodology 6199
  - natural regeneration, France, methodology 1017
  - nature conservation, Germany 9615
  - Netherlands 807
  - optimization methods, decision making 9610
  - permits, afforestation, environmental protection, South Africa 6989
  - policy, sustainability, economics, Sweden 9647
  - public opinion, participation, USA 7702
  - public relations, USA 8542
  - remote sensing, imagery, geographical information systems 1016
  - simulation 6823
  - sustainability
    - Papua New Guinea 4413
    - *Pinus roxburghii,* India 1010
  - theory, *Tectona grandis,* forest economics, India 2786
  - tropical forests
    - Francophone Africa 8519
    - West Africa 8520
  - valuation, USA, non-market benefits 5192
  - wildlife, population dynamics, data analysis 4911
- plant nutrition, plant water relations, Australia 7826
- planting stock, requirements, Germany 9481
- population pressure, India 6205
- primates, rain forests, nature reserves, Uganda 4057
- private forestry
  - carbon cycle, simulation, USA 3630
  - education, USA, surveys 53
  - forest economics, USA 210
  - research, USA 1642
  - USA
    - incentives 4245
    - timber supply 5040
- protection of forests
  - Europe 2518
  - forest economics, models, North America 6248
- *Quercus,* forest decline, USA 6504
- *Quercus cerris,* Italy 7833
- *Quercus suber,* mixed forests, soil fertility, Spain 1190
- rain forests, Africa South of Sahara, bibliographies 6794
- remote sensing
  - geographical information systems, USA, books 6774
  - image interpretation, Slovenia 5201
- rotations, forest economics, theory 4994
- savanna woodlands, development projects, Guinea 9604
- savannas, silvicultural systems, climate, Africa 8600
- secondary forests, growth models, research, Australia 6833
- selection system, yield forecasting, Japan, planning 4411
- silvicultural systems, selection system, Iran 6102
- silviculture
  - computer techniques, Canada, decision making, planning 9368
  - planning, Germany 9617
  - sustainability 6106
  - theory 4378
  - woodlands, synecology, layer structure, UK 10149
- simulation
  - forest ecology, plant succession, reviews 7681
  - Japan, methodology 2680
  - USA 3350
- site factors
  - boreal forests, conferences 4174
  - subalpine forests, conferences 4174

Forest management *cont.*

- socioeconomics
  - development projects, Burkina Faso 8538
  - savanna woodlands, Southern Africa, research 8527
- soil fertility
  - biomass production 7924
  - site factors 7923
- soil pH, Central Europe 287
- stand structure, development, silviculture, theory 5191
- standards, environmental impact, Australia 6791
- sustainability 5196
  - Arecaceae, stand characteristics, Mexico 7327
  - assessment, international cooperation, Canada 9620
  - Australia 8716
  - books 4157
  - boreal forests
    - international cooperation
      - Canada 9941
      - Europe 9941
      - Russia 9941
      - Scandinavia 9941
    - nature conservation, Canada, simulation 9621
  - Canada 3491, 4422
  - certification, USA 5039
  - community forestry
    - India 7834
    - Nepal 9290
    - protection of forests, forest products, Nepal 6742
  - conferences 6803
  - conservation, terminology 5935
  - Dipterocarpaceae, shelterwood system, natural regeneration, Sri Lanka 921
  - economics, private forestry, Costa Rica 5219
  - environmental protection, Latin America, books 7632
  - *Eucalyptus,* silviculture, South Africa 7794
  - forest economics
    - ethics, land ownership 2725
    - simulation 6834
  - forest plantations
    - New Zealand 5990
    - Tropics 6159
  - forest policy, Canada 7835
  - fuelwood, resources, land use, South Africa 4253
  - Ghana 2723
  - India 1014
  - Indonesia 6203
  - information needs, site class assessment, growth models, India 5189
  - insect pests, *Choristoneura fumiferana,* Canada 237
  - interest rates 7018
  - land use, Sahel, reviews 7830
  - logging
    - mountain forests, Sarawak 6988
    - tropical forests, deforestation 9609
  - multiple use, Slovenia 5025
  - *Picea abies,* stand development, Finland, simulation 9577
  - planning, Canada, simulation 9619
  - private organizations 1013
  - protection of forests, Europe, conferences 2484
  - research, conferences 7640
  - simulation, Russia 4415
  - Sudan 9397
  - tropical forests
    - Africa 6206
    - Central African Republic 8720
    - deforestation
      - Asia, conferences 6801
      - Australia, conferences 6801
    - forest policy, Indonesia 9391
    - indigenous knowledge
      - India 2724
      - Latin America 7690
    - methodology 6207
  - USA, logging 1846

Forest management *cont.*
- sustainability *cont.*
  - yield regulation, history 8513
- systems analysis, conferences 2472
- *Tectona grandis,* silviculture, Indonesia, forest policy 8668
- Temperate Zones, forests, natural resources 8517
- terminology, Australia 6796
- theory
  - forest ecology 9571
  - Italy 7832
- thinning, stand density 8651
- tropical forests
  - development projects
    - Guinea 9604
    - Honduras 9607
  - forest policy, deforestation, development projects 8514, 9370
  - history, India, ecology 5031
  - hunting, Bolivia 5813
  - natural regeneration, forest plantations, Bangladesh 6105
  - nature conservation, sustainability, Developing Countries 5857-5858
  - sustainability 1012
  - tenure systems, community forestry, Latin America 3494
- uncertainty, simulation 7828
- ungulates, forest trees, national parks, Poland 4058
- urban forestry, USA, books 8472
- USA
  - national forests, public opinion 1647
  - private forestry 3502
- vegetation types, synecology, Mexico 4773
- weed control, herbicides, USA 1768
- wetlands
  - hydrology, USA 7546
  - USA 6799
- wildlife
  - Australia 10064
  - bottomland forests, USA 7513
  - Central Europe 4913
  - conferences 4173
  - geographical information systems, simulation 236
  - Hungary 4914
  - logging, Canada 4912
  - planning, uncertainty 8726
  - research 4910
  - simulation, USA 6991
  - small mammals, USA 7517
- wildlife conservation, Australia 9230-9231
- wind damage
  - classification, UK 6265
  - UK 6273
- women
  - development projects, India 1631
  - indigenous knowledge, minor forest products, India 6846
- woodlands, indigenous knowledge, Zimbabwe, books 7627

Forest nurseries (*see also* Planting stock; Vegetative propagation)
- *Acacia,* irrigation, seedling growth, Jordan 7767
- *Acacia auriculiformis,* provenance trials, India 1669
- afforestation, Italy 143
- *Albizia procera,* nitrogen fertilizers, plant growth regulators, India 9474
- Argentina 909
- bacterial diseases, *Pseudomonas solanacearum, Tectona grandis,* Bangladesh, control 6638
- bare rooted stock, conifers, weed control, management, surveys 9482
- *Bauhinia variegata,* plant nutrition, nitrogen, phosphorus, India 8597
- biofertilizers, *Rhizobium, Acacia nilotica,* India 142
- books 4144
- broadleaves
  - fertilizers, sewage, India 6905
  - planting stock 6072

Forest nurseries *cont.*
- canes and rattans, *Daemonorops melanochaetes,* fertilizers, Indonesia 1803
- conifers, seedling growth, Canada, container grown plants 8595
- container grown plants
  - growing media
    - irrigation, *Pinus sylvestris,* Finland 3422
    - peat, soil water movement 6901
    - *Sphagnum, Picea,* Canada 6082
  - *Picea,* Canada, seedling growth 139
  - *Picea mariana,* frost resistance 2803
  - *Pinus sylvestris,* irrigation, water availability, growth 6077
- containers
  - broadleaves, seedling growth, survival, Bangladesh 6076
  - Italy 144
  - *Quercus robur,* Germany 9475
  - testing, *Eucalyptus globulus,* Chile 3425
- *Dalbergia sissoo,* planting stock, stumps, production, Pakistan 6074
- deforestation, fuelwood, Malawi 3423
- ectomycorrhizas, *Suillus luteus, Quercus rubra,* USA 3149
- equipment, roots, natural pruning 2623
- *Eucalyptus,* fertilizers, seaweed products, South Africa 9476
- fertilizers, requirements, Canada, assessment 908
- forest trees
  - Germany, conferences 5940
  - herbicides, UK, tolerance 2644
- frost protection, *Pinus sylvestris,* Sweden 5120
- fungal diseases
  - *Cochliobolus lunatus, Acacia nilotica,* India 9085
  - conifers, Finland 5619
  - *Cronartium fusiforme, Pinus taeda,* control 4025
  - *Fusarium, Pinus nigra,* Italy, control 1467
  - *Populus deltoides,* India, control 10024
  - *Pythium, Pinus nigra,* Italy, control 1467
  - *Ravenelia sessilis, Albizia chinensis,* India 605
  - *Rhizoctonia*
    - conifers
      - Finland 5620
      - Norway 5620
    - *Pinus nigra,* Italy, control 1467
  - *Robinia pseudoacacia,* biological control, Russia 10020
- *Grevillea robusta,* planting stock, root pruning, India 145
- growing media
  - container grown plants
    - reviews 9472
    - Scandinavia 9472
  - *Dryobalanops aromatica,* seed germination, Peninsular Malaysia 7730
  - *Eucalyptus,* Sri Lanka 5115
  - *Leucaena leucocephala,* Sri Lanka 5115
  - mulches, irrigation, *Albizia procera,* India 4313-4314
  - multipurpose trees, Dominican Republic 6088
  - *Paraserianthes falcataria,* phosphorus fertilizers, Indonesia 903
  - peat, properties, Finland 6081
  - *Shorea macroptera,* seed germination, Peninsular Malaysia 7730
  - sowing depth, *Acacia mangium,* India 9470
  - *Sphagnum, Picea mariana,* water stress, Canada 6083
- insect pests
  - biological control 7501
  - *Chrysocoris purpureus, Populus deltoides,* India 7433
  - fungal diseases, Portugal 4160

Forest nurseries *cont.*
- insect pests *cont.*
  - *Holotrichia serrata, Tectona grandis,* Sri Lanka, chemical control 5782
  - surveys, *Paraserianthes falcataria,* India 2300
- lifting, storage, *Pinus ponderosa,* USA 907
- management, *Bombacopsis quinata,* Colombia 1731
- multipurpose trees
  - irrigation, waste water, Niger 9473
  - Nepal, planting stock, production costs 9480
- mycorrhizas
  - broadleaves, nitrogen fixation, Ethiopia 1446
  - conifers, afforestation, France, plant nutrition 5576
  - *Laccaria bicolor, Pseudotsuga menziesii,* persistence 5595
  - *Laccaria laccata*
    - *Pinus patula,* seedling growth 4850
    - *Pseudotsuga menziesii,* France, assessment 9992
  - *Laccaria proxima, Picea sitchensis,* fertilizers, UK 906
  - *Picea sitchensis,* Irish Republic 8279
  - *Pinus ponderosa,* Argentina, seedling growth 4009
  - *Thelephora terrestris, Pinus patula,* seedling growth 4850
- ornamental woody plants, container grown plants, roots 4137
- outplanting, trials, experimental design 28
- pesticides, safety, Nepal 6899
- *Picea glauca*
  - fertilizers, Canada, interactions 2619
  - nitrogen fertilizers, nutrient deficiencies, phosphorus 5111
- *Picea mariana,* stems, deformation, Canada 1729
- *Picea pungens,* nutrient deficiencies, Germany, potassium 1147
- *Pinus halepensis,* weed control, Algeria 5116
- *Pinus peuce,* seed germination, seedling growth, plant nutrition, UK 9469
- *Pinus sylvestris,* NPK fertilizers, nutrient uptake, nitrogen 4306
- *Populus* 'Conti 12', weed control, herbicides, Argentina 943
- *Populus deltoides,* variety trials, India 9418
- pruning, *Pinus,* frost resistance, USA 273
- *Prunus,* nitrogen fertilizers, irrigation, UK 4311
- *Pterocarpus angolensis*
  - seedling growth
    - Tanzania
      - artificial regeneration 9479
      - fertilizers 9479
      - natural regeneration 9479
      - roots, pruning 9479
- *Robinia pseudoacacia,* plant nutrition, India 6089
- root nodules, *Frankia, Alnus rubra,* USA, soil pH 2231
- seedlings, Sweden, testing, quality 9477
- soil solarization, Italy 5118
- soil sterilization, *Alnus glutinosa,* UK 2620
- sowing, growing media, *Grevillea banksii,* India 140
- sowing depth
  - *Acacia,* seedling growth, temperature, drought resistance 4312
  - *Melia azedarach,* India 904
  - *Phyllanthus emblica,* India 904
- *Taxus,* medicinal plants, USA, prunings disposal 4308
- techniques, *Celtis australis,* India 5114
- transplanting
  - *Gymnocladus dioica*
    - tree guards
      - increment, USA 442
      - plant water relations, USA 442

Forest nurseries *cont.*
- transplanting *cont.*
  - seedling growth, *Shorea stenoptera,* Indonesia 1719
- weed control, New Zealand, herbicides, tolerance 8598
- wrenching, *Pinus,* frost resistance, USA 273

Forest ownership
- Arecaceae, forest resources, resource utilization, forest management, Nigeria 7700
- deforestation, simulation 4104
- forest economics, Germany 9655
- forest inventories
  - geographical information systems, USA 6234
  - USA 3351
- forest management
  - forest policy
    - Cameroon 8518
    - Thailand 8518
  - USA, opinions 1645
- geographical information systems, land classification, USA 6235
- Germany, conferences 9329
- land use
  - mapping, forest management, Indonesia 2758
  - nature conservation, Australia 6713
- legal rights
  - deforestation 5862
  - Russia 8751
- silvicultural systems, selective felling, Fiji 8601
- Slovenia 5024
- stand characteristics, remote sensing, classification, USA 6223
- thinning, Japan, forest economics 7791
- urban forestry, amenity forests, Norway, public opinion 10134

Forest parks (*see* Amenity forests)

Forest pests
- Central America, books 4146-4147
- forest decline 3807
- forest management, management, control, decision making 10053
- geographical information systems, forest inventories, mapping 9632
- *Pinus ponderosa,* canopy gaps, forest management, USA 8986

Forest plantations
- *Acacia,* biomass production, Congo, plant composition, major elements 6980
- *Acacia auriculiformis,* weight tables, Bangladesh 1001
- *Acacia mangium*
  - biomass production, equations, weight tables, Bangladesh 6975
  - increment, Sabah 1748
- *Acer macrophyllum,* control, USA 4349
- age
  - *Acacia nilotica,* lopping, increment, India 1798
  - basal area, streams, nitrate, UK 8864
  - *Cryptomeria japonica,* biomass production, plant composition, India 3482
  - *Eucalyptus camaldulensis,* plant composition, nutrients, Sri Lanka 5294
  - *Eucalyptus tereticornis,* plant nutrition, biomass production, India 7973
  - mycorrhizas, *Glomus, Casuarina equisetifolia,* India 6617
  - *Robinia pseudoacacia,* biomass production, distribution, India 1837
- agricultural land, *Picea abies,* pulpwood production, wood properties, Sweden 8007
- *Ailanthus excelsa,* nitrogen-phosphorus fertilizers, sandy soils, India 131
- *Alnus nepalensis,* nitrogen cycle, India 4531
- biodiversity, New Zealand 6745
- broadleaves
  - Australia, research 3353
  - Indonesia 930
  - mixtures, Italy, growth 8626
  - roots, distribution, India 2952

Forest plantations *cont.*
- broadleaves *cont.*
  - sand dune stabilization, Senegal 4939
- *Callitris columellaris,* understorey, biomass production, soil properties, India 4334
- carbon cycle
  - New Zealand 4597
  - UK 4315
- *Carya illinoinensis,* weed control, herbicides, USA 172
- *Casuarina equisetifolia*
  - nitrogen cycle, India 4531
  - soil chemistry, nitrogen, India 356
- choice of species, Costa Rica 9423
- *Cocos nucifera,* Togo 8533
- conifers
  - fertilizers, soil types, Russia 5108
  - forest economics, New Zealand, Korea Republic, foreign investment 8747
  - plant competition, USA, survival 6922
  - site class assessment
    - Canada 8703
    - statistical analysis, Argentina 225
  - stand density, growth models, equations 9586
  - thinning, Italy 945
  - volume determination, equations, nondestructive testing 6161
  - weed control, Russia 2642
  - woody weeds, plant competition, height, diameter 6126
- *Cunninghamia lanceolata,* soil fertility, China 8018
- *Dalbergia sissoo*
  - forest influences, soil properties, India 1993
  - irrigation, stand establishment, India 8630
- damage, ditches, maintenance, forestry machinery, Finland 3448
- ecology, economics 929
- edible fungi, *Tuber,* Sardinia 6158
- establishment
  - mortality, seasonal variation, Spain 1746
  - *Tectona grandis,* increment, forest economics, Indonesia 6188
  - *Terminalia brownii,* water stress, irrigation, Kenya 3611
- *Eucalyptus*
  - Chile 6134
  - development projects, Rwanda 8535
  - forest influences, soil properties, Australia 1185
  - forest policy, rural economy, Congo 8534
  - public opinion, Spain 5979
  - silviculture, research, Australia 4364
  - weed control, increment, South Africa, simulation 7786
- *Eucalyptus exserta,* cycling, China, simulation 1139
- *Eucalyptus globulus*
  - silviculture, Chile 3464
  - stand structure, canopy, simulation 7817
- *Eucalyptus tereticornis*
  - sample plot technique, growth models 6210
  - soil amendments, soil types, India 883
- fertilizers, sewage, industrial wastes, Poland 899
- fire danger, fuels, height, Canada 6957
- forest influences
  - soil chemistry, lateritic soils, India 8023
  - soil properties, reviews 1185
- forest management
  - biodiversity, Mediterranean Region 2640
  - multiple use, New Zealand, attitudes 2539
  - sustainability
    - New Zealand 5990
    - Tropics 6159
- forest trees
  - Brazil, development 49

Forest plantations *cont.*
- forest trees *cont.*
  - diameter, increment, growth models, plant competition 9598
  - Germany, conferences 5940
  - New Zealand 5992
  - soil biology, India, seasonal variation 7940
- forests, multiple land use, species diversity, Spain 8407
- fragmentation, birds, forest ecology, Netherlands 4067
- fungal diseases, *Pinus,* Croatia 4855
- *Gmelina arborea*
  - increment, biomass production, Ghana 5174
  - site preparation, increment, Ghana 5131
  - volume determination, merchantable volume, equations, Nigeria 7669
- grasslands, *Acacia mangium,* forest fires, Indonesia 1996
- hardwoods, wood chemistry, USA 8919
- height, increment, climate, Spain 1826
- *Heritiera utilis,* silviculture, Côte d'Ivoire 9495
- hydrology, New Zealand 5833
- increment, *Eucalyptus globulus,* saline soils, reclamation, Australia 9246
- insect pests
  - *Cinara todocola, Abies sachalinensis,* Japan, spacing 633
  - *Hylobius abietis*
    - *Pinus sylvestris*
      - Finland
        - models 10043
        - survival 10043
  - surveys, *Paraserianthes falcataria,* India 2300
- Italy, silviculture 6012
- *Juglans nigra*
  - economics, returns, USA 5212
  - weed control, herbicides, USA 172
- *Khaya,* silviculture, Côte d'Ivoire, growth, yield forecasting 4333
- land use, landscape ecology, fragmentation, Spain 3871
- *Larix decidua,* France, history 2638
- *Larix gmelinii,* nitrogen cycle, China 7964
- *Leucaena leucocephala,* nitrogen cycle, India 4531
- management, *Pinus nigra,* agroforestry, France 5877
- mixtures
  - irrigated stands, Azerbaijan, increment, weeds 1004
  - Ukraine 1783
- models
  - biodiversity, conservation, India 4338
  - forests, biodiversity, nature conservation, India 4970
- mortality, *Eucalyptus,* increment, drought, South Africa 7873
- multipurpose trees, degraded land, reclamation, Philippines 8624
- New Zealand, environmental impact 6367-6368
- *Nothofagus,* natural regeneration, increment, Chile 6184
- *Paraserianthes falcataria*
  - forest litter, measurement, Philippines 1910
  - soil properties, India, factor analysis 9686
- pastures, establishment, trials, broadleaves, France 5880
- pesticides, water pollution, Australia, buffer zones 6358
- *Phyllanthus emblica,* increment, fruiting, India 1743
- *Picea abies*
  - beating up, increment, plant morphology, Sweden 9529
  - forest influences, soil properties, Europe 1185
  - plant nutrition, Slovenia, seedling growth 5126
  - sample plot technique, growth models 6210

- **Forest plantations** *cont.*
  - *Picea abies cont.*
    - soil chemistry, nutrients, Canada 5358
    - spacing, Russia 1778
    - volume determination, Slovenia, old fields 2683
  - *Picea sitchensis*
    - forest influences, soil chemistry, UK 360
    - streams, pH, UK 354
  - *Pinus*
    - insect pests, Venezuela 6645
    - natural regeneration, site factors, Japan 7772
    - soil formation, Croatia 4602
    - weed control, USA 170
  - *Pinus banksiana,* insecticides, application, Canada 5794
  - *Pinus caribaea*
    - research, Caribbean 953
    - soil properties, Sri Lanka 5348
    - weed control, herbicides, phytotoxicity, Cuba 1763
  - *Pinus palustris,* mensuration, USA, equations 6165
  - *Pinus patula*
    - mycorrhizas, fertilizers, South Africa 4846
    - rotations, forest litter, Swaziland 7895
  - *Pinus pinaster*
    - canopy, precipitation, simulation, France 7679
    - spacing, France, growth, wood properties 6924
  - *Pinus ponderosa,* weed control, USA, economics 1756
  - *Pinus radiata*
    - agroforestry, Chile 5878
    - Chile 157
    - erosion, hurricanes, remote sensing, New Zealand 5200
    - forest influences
      - soil properties
        - Australia 1185
        - Chile 1185
        - New Zealand 1185
    - landslides, New Zealand 4940
    - rotations, economics, Australia 6247
    - streams, water temperature, New Zealand 8376
    - watersheds, hydrology, New Zealand 8375-8376
  - *Pinus resinosa*
    - soil chemistry, nutrients, Canada 5358
    - thinning
      - simulation, USA 8508
      - yield forecasting, growth models, Canada 5966
  - *Pinus sibirica,* stand characteristics, Russia 5168
  - *Pinus* (Southern), short rotation forestry, wood properties, USA, conferences 2459
  - *Pinus sylvestris*
    - beating up, increment, plant morphology, Sweden 9529
    - biomass, distribution, site types, Russia 232
    - forest influences, soil properties, Europe 1185
    - forest litter, decomposition, Spain 7915
  - *Pinus taeda*
    - plant competition, thinning, USA 2122
    - weed control, USA, herbicides 3449
  - *Populus,* increment, Poland 936
  - *Populus canadensis,* biomass production, increment, forest litter, Pakistan 9591
  - *Populus deltoides,* weed control, herbicides, USA 173
  - protection, trenching, cattle, India 681
  - *Pseudotsuga menziesii*
    - increment, USA, forest borders 3483
    - weed control, *Alnus rubra,* USA 1764
  - *Quercus*
    - pseudogleys, increment, Slovenia 2695
- **Forest plantations** *cont.*
  - *Quercus cont.*
    - weed control, herbicides, USA 172
  - rabbits, *Oryctolagus cuniculus,* Australia, control, books 6787
  - rodents, *Picea sitchensis,* UK 7542
  - *Salix,* silviculture, Azerbaijan 1787
  - *Santalum album,* heartwood, soil properties, Indonesia 1985
  - *Shorea,* wood properties 350
  - *Shorea robusta,* India 933
  - silvicultural conversion, coppice, *Eucalyptus occidentalis,* runoff, Italy 4935
  - silviculture
    - conifers, grazing, France 5876
    - France, growth 932
    - guidelines 8599
  - site preparation, Italy, runoff, erosion 7782
  - site requirements, guidelines 9483
  - soil fertility, soil classification, New Zealand 6366
  - soil water, precipitation, South Africa, simulation 9354
  - species trials, grazing, France 5884
  - stand development, yield forecasting, growth models, Germany 4222
  - sustainability, mangroves, underplanting, Bangladesh 6108
  - *Tectona grandis*
    - improvement planting, Indonesia 931
    - increment, weed control, India 161
    - India 8628
    - sample plot technique, growth models 6210
  - thinning, conifers, France, planning, forest economics 2654
  - tissue culture, mycorrhizas, Asia, conferences 8483
  - tree breeding, genetic diversity, reviews 8184
  - *Triplochiton scleroxylon*
    - forest borders
      - increment
        - Cameroon 4594
          - equations 5013
  - tropical forests, natural regeneration, forest management, Bangladesh 6105
  - valuation, national accounting, New Zealand 7705
  - weed control
    - biological control, New Zealand 1758
    - herbicides, New Zealand 1758
  - weeds, damage, Indonesia 1755
  - wildlife, *Eucalyptus saligna,* understorey, Brazil 7515
  - wind damage, Réunion, hurricanes 9674
  - woody weeds
    - *Pseudotsuga menziesii*
      - weed control
        - USA
          - economic evaluation 171
          - simulation 171
- **Forest policy** (*see also* Forestry development)
  - community forestry, India 1630
  - deforestation
    - climatic change, biodiversity 5023
    - Costa Rica 6852
    - theory, simulation 8412
    - timber trade, trade sanctions, simulation, Tropics 4956
  - development, USA 6853
  - economic development, South East Asia 9392
  - *Eucalyptus,* forest plantations, rural economy, Congo 8534
  - Europe, rural areas, development, planning 9375
  - forest administration
    - Australia 4242
    - UK 5028
  - forest ecology, climatic change 1961
  - forest economics
    - afforestation, carbon cycle, market economics 2780
    - Central Europe 2770
    - Hungary 2771
    - Mexico 2776
    - Poland 2773-2774
- **Forest policy** *cont.*
  - forest economics *cont.*
    - rural development, China 5982
    - Russia 2772
    - Slovakia 2774
  - forest management
    - biodiversity, nature conservation, Sweden 9387
    - development projects, Africa South of Sahara 9395
    - forest economics, India 47
    - forest ownership
      - Cameroon 8518
      - Thailand 8518
    - history, USA, national forests, books 5927
    - land use planning, Italy 6208
    - multiple use, gender relations, India 4238
    - nature reserves, USA 4423
    - planning, UK 2714
    - sustainability, Canada 7835
    - UK 8522
      - conferences 8482
    - USA 8539
  - forest resources, forest management, sustainability, models 5190
  - forestry
    - Europe, Canada 43
    - European Communities, Canada 43
    - nature conservation 7597
      - Switzerland 7589
    - UK 2516
  - forestry development
    - forest products industries, degraded forests, India 2521
    - rural development, Finland 5029
  - Germany 5975
    - decision making 9380
  - greenhouse effect, climatic change, Poland 2797
  - history, Sweden 4236
  - Italy, ministries of agriculture 8526
  - land use, multiple use, USA, simulation 2515
  - legislation 3354
    - forest economics
      - Albania 2528
      - Poland 2528
    - forest management, economics, forest administration, Russia 9386
    - Switzerland 42
  - nature conservation, Australia 2526, 7595
  - rain forests
    - deforestation, Western Samoa 6718
    - nature conservation
      - Indonesia 7598
      - simulation, Indonesia 6849
    - non-governmental organizations 5970
    - women, Latin America 7630
  - social forestry, India 5036
  - Thailand, food supply 5035
  - tropical forests
    - deforestation, economics 5863
    - forest management
      - deforestation, development projects 8514, 9370
      - sustainability, Indonesia 9391
  - UK 41
- **Forest products**
  - carbon cycle, Finland 5026
  - community forestry, forest management, sustainability, protection of forests, Nepal 6742
- **Forest products industries**
  - agroforestry, South Africa, production possibilities 724
  - forest management, land use, Kenya, conflict 2718
  - forest policy, forestry development, degraded forests, India 2521
- **Forest recreation**
  - Austria 2430
  - Belgium 9307
  - deer, *Capreolus capreolus,* Germany 7537
  - forest management
    - landscape, Denmark 1583
    - planning
      - Japan 5193
      - USA 4425

Forest recreation *cont.*
- hydrology, Ukraine, damage 4976
- landscape
  - perception, USA 5900
  - USA, consumer preferences 2427
- management, planning, Greece 737
- mangrove forests, nature conservation, India 3282
- nature reserves, Costa Rica, valuation 8445
- permits, wilderness, USA 9306
- *Pinus*, controlled burning, stand characteristics, USA 6378
- regulations, national parks, USA, sociology 10132
- research, USA, conferences 2468
- surveys, traffic, UK 2429
- trampling, resistance, USA 5901-5902
- urban areas, France, surveys 1585
- USSR 1586
- valuation
  - Germany 8744
  - Sweden 8745

Forest resources (*see also* Forest statistics)
- acid deposition, Sweden, growth 3674
- agroforestry, Cameroon 9396
- Albania 7692
- amenity trees, landscape, plant genetic resources 2433
- Australia, reports 2527
- biodiversity, nature conservation, USA 7631
- biomass, for energy, rural development, conferences 6790
- boreal forests, forest management 1372
- Cameroon, utilization, socioeconomics 8530
- canes and rattans, Bangladesh 810
- carbon cycle, valuation, Developing Countries 3686
- *Castanea sativa*, silviculture, Italy 3465
- climatic change, simulation, USA 3543
- customary law, Indonesia, economic development, shifting cultivation 3344
- deforestation
  - land use, forest management, Chile 5989
  - non-wood forest products, Zimbabwe 8417
  - refugees, Malawi 6720
  - surveys, remote sensing, India 1551
- Europe 6841
  - books 9320
- European Communities, forest products industries, politics 804
- farm forestry, surveys, Kenya 3250
- forest fires, Greece, damage 4614
- forest inventories, Finland 5027
- forest management
  - India, tribal society 7698
  - Italy 805
  - rural economy, cooperatives, Developing Countries 4463
  - sustainability, planning 8719
- forest policy, forest management, sustainability, models 5190
- forestry, Chile 9400
- genetic resources, nature conservation, Brunei Darussalam 4965
- history, Germany 4234
- Indonesia, forest products industries, timber trade 3346
- land use
  - forest management, Guinea 5033
  - natural regeneration, South East Asia 5034
- *Larix decidua*, forest management, Italy, stand characteristics, landscape 9540
- Malaysia, research 3345
- management, women, indigenous knowledge, Burkina Faso 1633
- mapping, forest management, India 3523
- Mexico, sustainability 4240
- *Populus*
  - Canada 4241
  - forest economics, USA 813
- remote sensing
  - Madagascar 3524
  - radar 6238

Forest resources *cont.*
- research, USA, bibliographies 763
- resource utilization, Arecaceae, forest ownership, forest management, Nigeria 7700
- Russia 2520
- stand characteristics, France, coastal areas 9929
- surveys, assessment 3522
- sustainability, utilization, India, conferences 20
- tropical forests
  - deforestation, timber trade 5860
  - remote sensing, radar, land use 262
- utilization, ethnic groups, rain forests, education, Nicaragua 1644
- vegetation types, Armenia 9394

Forest roads
- bitumen, soil pollution, Germany 1982
- boreal forests, soil compaction, tillage, Canada 1089
- conifers, logging, Japan, access 9603
- development policy, Switzerland, books 4161
- environmental impact, Switzerland 235
- erosion, Korea Republic 8727
- logging, silviculture, Japan 4419
- planning
  - Indonesia 6202
  - Japan 1018
    - methodology 7831
  - theory 1845
- road construction
  - costs, transport, Japan, analysis 2720
  - Japan, economics, analysis 9612
  - Korea Republic, durability, stability 8728
  - planning
    - analysis 2721
    - forest economics, costs 9606
  - Sweden, techniques 9613
- slopes, Japan, planning 6194
- soil stabilization, plant colonization, USA, grasses 4088
- strip roads, *Picea abies*, stand development, thinning, Sweden 6983

Forest soils (*see* Soil types)

Forest statistics, Canada, reports 8476

Forest surveys (*see* Forest inventories; Forest resources; Forest statistics)

Forest taxation (*see* Taxes)

Forest trees
- acid deposition, simulation, Netherlands 1967
- air pollution
  - Arid Regions, reviews 1968
  - control, India, reviews 3668
  - experimental design, growth chambers, reviews 5957
  - Finland, field experimentation, growth chambers 5955
  - foliage, cuticle, conferences 2450
  - plant physiology, abiotic injuries 1154
- altitude, water use efficiency, North America 4513
- assimilation, measurement, France, equipment 2487
- biodiversity, tree breeding, conservation, Canada, research 3124
- biology, agriculture, silviculture, Tropics, reviews 9372
- biomass production, remote sensing 2705
- branches, foliage, habit, New Zealand 4620
- branching, patterns, reviews, theory 8044
- carbon cycle, simulation, Spain 2849
- carbon dioxide enrichment
  - habit, simulation 7863
  - phloem, carbohydrates, translocation 7178
  - simulation, growth 2697
- cavitation, acoustic emissions, measurement 4184
- choice of species, forestry development, South America, handbooks 2551
- classification, wood properties, choice of species, forest management, Venezuela 6025
- climate, geographical distribution, synecology, New Zealand 7266

Forest trees *cont.*
- climatic change, global warming, stand structure, botanical composition 7029
- crown
  - buttresses, Central America 2958
  - forest decline, Italy, assessment, methodology 5951
  - growth models, volume 4219
  - morphology, simulation 798
  - shape, light, theory 3713
- data banks, Italy 214
- deer, *Odocoileus virginianus*, browse, USA 3196
- diseases
  - Canada, books 7633
  - conferences 5002
  - plant disorders, books 8467
- endangered species, Amazonia, logging 1174
- epiphytes, mycorrhizas, USA 9080
- ethnobotany 803
- exotics, UK 5003
- flora
  - domestication, history, New Zealand 2131
  - lowland areas, Indonesia, books 4163
- flowering, induction, Tropics, reviews 8955
- foliage
  - nutrients, precipitation, Puerto Rico 1938
  - reflectance, remote sensing, stress 2769
- forest decline, coastal plant communities, France 3808
- forest ecology, climatic change, plant physiology, genetics, conferences 1606
- forest management
  - multiple use, New Zealand, attitudes 2539
  - simulation 2513
- fuel plantations
  - choice of species, India 58
  - India 2540
- fungal diseases
  - biological control, *Trichoderma harzianum*, enzymes 7409
  - endophytes, Italy, reviews 6625
- gas exchange, leaf water potential, drought, USA 4709
- genetic engineering, male sterility, reviews 7337
- genetic markers, reviews 9028
- genetic resources
  - Canada 7340
  - conservation
    - Colombia 3968
    - Europe, networks 2176
    - Tanzania, techniques 8236
  - nature conservation, Chile 7335
- genetics
  - climatic change, adaptation 2172
  - hybrids, polyploidy, simulation 7338
- geographical distribution
  - altitude, India 1356
  - maps, Austria 7001
  - migration, global warming, USA, simulation 9665
- ground vegetation, plant competition, soil fertility, roots, theory 3875
- growing stock, stand characteristics, Finland 4396
- growth, canopy gaps, equations, methodology 27
- growth models
  - carbon balance, plant morphology, equations 9589
  - methodology 4207
  - plant competition, plant physiology, simulation, conferences 4179
  - uncertainty, analysis 4217
- growth stress, maturation, mechanics, theory, simulation 4635
- hedges, land use, Guinea 9242
- height
  - diameter, simulation, statistical analysis 1617
  - estimation, forest inventories, South Africa, equations 212

Forest trees *cont.*
- height *cont.*
  - growth models 4395
- history, research, Zimbabwe 6861
- increment
  - Canada, measurement, research 1643
  - height, simulation 228
- insect pests
  - biological control, France 9184
  - Coleoptera, Russia, disease vectors, decay fungi 9131
  - Developing Countries, biological control 5805
  - Europe 2305
  - *Formica exsectoides,* USA, control 666
  - *Lymantria dispar*
    - foliage, biology 637
    - Germany, control 5795
    - USA
      - pheromone traps 674
      - physical control 7498
  - New Zealand, biological control, reviews 679
  - North America 2305
- landslides, ferns, plant succession, plant competition, Puerto Rico 3872
- measurement, equipment, lasers 1852
- medicinal plants
  - ethnobotany, India, surveys 198
  - tissue culture, metabolites, books 749
- mistletoes
  - *Dendrophthoe falcata,* India 6642
  - *Scurrula,* India 6642
- monographs 2
- morphology, simulation, agroforestry 9356
- mycorrhizas
  - *Amanita,* Nepal 7386
  - plant nutrition, metal tolerance 8276
  - reclamation, mined land, Australia 5590
  - Taiwan 3158
- natural regeneration
  - hurricanes, Jamaica 1891
  - UK, surveys 5440
- nature conservation
  - arboreta
    - Irish Republic 5003
    - UK 5003
- North America, guide books 7622
- nutrient deficiencies, biogeochemistry 7974
- nutrient uptake
  - calcium, soil chemistry, models 3627
  - magnesium, soil chemistry, models 3627
- phenology
  - flowering, fruiting, Venezuela 5368
  - seasonality, conferences 7639
- photosynthesis
  - carbon dioxide enrichment, acclimatization 1283
  - foliage, age, Costa Rica 6493
- plant anatomy, measurement, techniques 2049
- plant competition, natural thinning, simulation 9362
- plant genetic resources, conservation, Denmark 8187
- plant morphology, measurement, sampling 6956
- plant nutrition
  - reviews 5300
  - silviculture, statistical analysis 5014
  - soil chemistry
    - fertilizers, logging, conferences 770
    - soil amendments, logging, conferences 770
- plant succession, classification, statistical analysis 4751
- plant water relations, sap flow, methodology 6304
- planting, Tropics, books 5933
- plus trees, progeny testing, genetic gain 2177
- pollination, genetic diversity, air pollution, climatic change, reviews 5424
- population dynamics, savannas, Côte d'Ivoire, simulation 2511

Forest trees *cont.*
- population genetics, reviews 2175
- populations, plant competition, light, simulation 9363
- progeny testing, early selection, France, statistical analysis 1419
- provenance trials, genotype environment interaction, climatic change, simulation 1659
- pruning, books 4152
- radionuclides, fallout, latitude 4547
- rain forests
  - flora, Australia, books 4996
  - keys, computer techniques, Australia 6769
  - water uptake, Panama 5283
- reaction wood, measurement, morphology, development 4584
- recalcitrant seeds, storage, water stress 839
- reclamation, species trials, saline soils, Australia 7715
- reproductive behaviour
  - biology, control, conferences 9327
  - theory, evolution 3827
- respiration
  - dark, foliage, nitrogen, simulation 8102
  - foliage
    - nitrogen
      - Canada 8102
      - USA 8102
- rights of way, plant succession, USA 7310
- root systems, slopes, Japan, stability 4600
- roots
  - carbon dioxide enrichment, methodology 6423
  - dynamics, cycling, reviews 406
  - soil biology, carbon dioxide enrichment, simulation 6263
- salt tolerance, genetic variation, plant physiology, reviews 1887
- savanna woodlands
  - biomass, equations, Tanzania 6974
  - volume, equations, Tanzania 6974
- seed dispersal, land use, global warming, simulation 480
- seed production, estimation, analysis 3845
- seedlings
  - frost injury, frost heave, reviews 4482
  - frost resistance, simulation 9360
  - recruitment, simulation, USA, spatial distribution 4206
- seeds, biodiversity, conservation, research institutes, Australia 8549
- site class assessment
  - equations, mathematics 2690
  - height, equations 1616
- site requirements, soil chemistry, base saturation, Germany 9695
- spatial distribution, patterns, plant competition, measurement, techniques 9340
- stand characteristics, growth models, algorithms 4220
- stand development
  - growth models
    - methodology 4216
    - natural thinning 5963
- stand structure, French Guiana, growth 6985
- stem form
  - eccentricities, measurement, methodology 2932
  - growth rings, canopy, simulation 4209
  - taper, simulation 4201
- stems
  - diameter, equations 1830
  - growth rings, distribution, equations 3715
  - height, equations 1830
  - mechanics, breakage, cavities in trees 5372
  - water storage, tropical forests, Costa Rica 4521
  - wood strength, defects, measurement 7651

Forest trees *cont.*
- stumpage value, USA, forest ownership, analysis 2778
- taxonomy, identification 2040
- tissue culture, research, Germany 7735
- tree breeding
  - experimental design 25
  - legislation, European Union 3966
  - tissue culture, genetic engineering 8189
- treelines
  - grazing
    - climate
      - Russia 7277
      - Scandinavia 7277
- tropical forests
  - Puerto Rico, basal area, growth 7825
  - roots, morphology, mycorrhizas, French Guiana 4640
- UK, books 6786
- uprooting, soil properties, USA 8869
- urban forestry, air pollution, tolerance, India 2875
- utilization, deforestation, Namibia 8531
- vegetation types, surveys, USA, history 3892
- vegetative propagation
  - India
    - research 93
    - reviews 93, 97
  - tree breeding, economics, reviews 94
- volatile compounds, USA 3741
- water balance, phytogeography, simulation 7682
- water stress, cavitation, USA 4522
- weeds, New Zealand, biological control, reviews 679
- wind damage
  - stand characteristics, reviews 8759
  - topography, Japan, analysis 7035
- wood anatomy, identification, keys, West Africa 490
- woody weeds
  - biological control, New Zealand 5136
  - plant succession, old fields, nature conservation, Japan 9019
- yield forecasting, simulation, Canada 4200

Forest types (*see* Vegetation types)

Forestry
- Albania, statistics 9377
- allelopathy, conferences 7644
- Arid Regions
  - books 7
  - research, Kenya, reviews 6000
- Asia 9388
- Australia, reports 2527
- beekeeping 8682
- bibliographies, Poland 1602
- biodiversity
  - Italy 5974
  - management, genetic resources 10126
  - nature conservation, sustainability, India 4974
- birds, land use, UK, species diversity 6689
- books 6777
- Canada, sustainability, multiple use 6851
- carbon balance, Finland, projections 9376
- carbon cycle
  - climatic change
    - global warming
      - Russia 9661
      - World 9661
- climatic change, energy resources, Sweden 4471
- conservation, legislation, India 1637
- cooperatives
  - France 9659
  - rural development, Japan, sociology 6847
- deforestation
  - climatic change 5224
  - forest management, Thailand, women, attitudes 8528
- development aid, Denmark 4232
- development projects
  - international cooperation, Thailand, reports 760
  - Lao, afforestation 5032
- draught animals, UK 5121

Forestry *cont.*
- economic resources, degradation, conservation, Côte d'Ivoire 2522
- education
  - China 5043
  - computer techniques 2514
  - Russia 5999
- environment
  - books 5930
  - development
    - India 5984
    - South East Asia 5984
  - Russia 44
- erosion, water pollution, legislation, USA 4938
- Estonia, statistics 9378
- European Union, membership, Sweden 1627
- fallout, Russia, Ukraine, Belarus 9408
- fertilizers, Netherlands, reviews 889
- Finland 5971
- Focus on forests 9369, 9631, 9649, 9661, 9859, 10118, 10123
- forest administration, forest economics, Mozambique 2775
- forest ecology, vegetation types, Asia, books, conferences 5922
- forest management
  - Guadeloupe, reviews 812
  - legislation, Spain 1636
  - Martinique, reviews 812
  - public opinion, USA 7701
- forest policy
  - Europe, Canada 43
  - European Communities, Canada 43
  - UK 2516
- forest resources, Chile 9400
- France
  - history 7693
  - metallurgy, degraded forests, history 2519
- fuelwood, utilization, energy policy, legislation, Uruguay 8551
- genetic resources, nature conservation 7590
- Germany 4233
- greenhouse effect, France 2792
- herbicides, USA 1762
- history
  - Europe 5976-5977
    - sociology 9384
  - Germany 6844
    - environment 4235
    - methodology 9382
  - India 7695
    - books 4155
  - Sweden 5973
- hydrology
  - clear felling, drainage, flooding, Sweden 4932
  - water quality, New Zealand 5834
- India, books 4154
- information science, computer techniques, France 820
- insecticides, Canada, research 2380
- international trade, Sweden, history 2517
- labour
  - Netherlands, Lyme disease 55
  - USA 56
- land use
  - multiple use, education 5998
  - nature conservation, history, Guinea 8537
  - Temperate Zones 1545
  - Tropics 1545
- landscape, Europe, periodicals 743
- legislation 2529
  - India 819
  - Russia 4244
  - waste disposal, UK 2892
  - wildlife, Peru 818
- loans, Philippines, environmental degradation 2781
- maps, geographical information systems, mathematical models 4451
- mechanization, reviews 2664
- Mediterranean Region, research, international organizations 3342
- metallurgy, history, Germany 6722
- nature conservation 7599
  - biodiversity 7592

Forestry *cont.*
- nature conservation *cont.*
  - biodiversity *cont.*
    - Brazil 6838
  - forest administration, New Zealand 7588
  - forest economics 7587
  - forest policy 7597
    - Switzerland 7589
  - land use 7586
  - legislation 7591
  - loans 7593
  - sustainability, South Africa 7594
- nectar plants, beekeeping, South Africa 6150
- New Zealand 1635
- non-governmental organizations 2538
- Oceania 9388
- organizations, forest administration 3340
- periodicals 7617
  - Ghana 4993
  - Sweden 2443
- pesticides, Germany 5673
- planning, management, sustainability, Arid Regions, books 4149
- Poland, statistics 9379
- public relations, Germany, conferences 4176
- public sector
  - European Communities 809
  - Spain 809
- remote sensing, radar, integration, infrared imagery, reviews 6241
- research 3356
  - application, constraints, conferences 6805
  - Australia 3355
  - Canada 52
  - education, India, conferences, books 7624
  - genetic resources, Mediterranean Region 3970
  - international organizations
    - CGIAR 6005
    - CIFOR 6005
    - ICRAF 6005
  - Malaysia, conferences 777
  - Mali 8532
  - management
    - Asia, conferences 2481
    - Oceania, conferences 2481
  - organizations, Poland, bibliographies 6792
  - Poland, bibliographies 761
  - sustainability 5996
  - Zimbabwe, conferences 775
- research institutes, Bangladesh, bibliographies 2458
- research projects
  - Namibia, development plans 5038
  - Rwanda, conferences 9323
- safety, ergonomics, labour 822
- social values, forest management, environment, USA 7704
- sociology
  - conflict, India, books 1
  - land reform, rural development, South Africa 48
- Sri Lanka, bibliographies 13
- statistics, Chile 2525
- sustainability
  - Arid Regions, reviews 7689
  - research, organizations, India 5044
- technology transfer, innovation adoption, Pakistan 3347
- training
  - communication, skills, rural development 8547
  - France 1641
  - India 9404
- UK 9373
- wildlife
  - nature conservation 7512
    - India 7511
- women
  - Africa 1632
  - Argentina 814
  - Bolivia 815
  - Ecuador 816
  - New Zealand 4243
  - Peru 817

Forestry *cont.*
- World, reviews 9369

Forestry development
- canes and rattans, Indonesia 971
- change 9570
- deforestation, Developing Countries 4101
- development projects, international cooperation, Vietnam 1628
- ecology, land use, India 1629
- environment, India, conferences 6806
- environmental impact, visibility 738
- forest management
  - agroforestry, Niger 811
  - sustainability, India 5030
- forest policy
  - forest products industries, degraded forests, India 2521
  - rural development, Finland 5029
- forest trees, choice of species, South America, handbooks 2551
- forests, nature conservation, Sri Lanka 1579
- history
  - Greece 6843
  - Portugal 1626
  - Russia 4235
- indigenous knowledge, Developing Countries, books 5925
- Indonesia 930
- intensive silviculture, Indonesia, ecology, environment 914
- investment, World Bank, India 51
- nature conservation, sustainability, projects 8515, 9371
- participation, waste land, reclamation, India 4092
- *Pinus halepensis,* agroforestry, rural economy, land use planning 8424
- planning
  - human resources, development aid, Indonesia 5983
  - Kenya 4239
  - management, development projects, India 9393
- sustainability, agroforestry, land use, indigenous knowledge, Vanuatu 9255
- vegetation types, forest management, Arid Regions, Africa 1011

Forestry law (*see* Legislation)

Forestry machinery
- afforestation, site preparation, Italy, research 6118
- chainsaws
  - Australia 1794
  - lubrication 1793
- *Cryptomeria japonica,* thinning, whole tree logging, mobile units 4369
- design
  - environmental degradation, environmental protection, research 9553
  - movement, walking 6944
- ergonomics 2665
- *Eucalyptus globulus,* planting, Chile 959
- forest plantations, damage, ditches, maintenance, Finland 3448
- mechanization, environmental impact, Sweden 5158
- pulling, trees, fungal diseases, control, Canada 5160
- reviews 2666
- safety, visibility, Japan, measurement 962
- scarifiers, disc cultivators, site preparation, Canada 1795
- site preparation 5157
  - Canada 1792
  - tyres, Canada 4366
- thinning, Canada 4368
- tillage, depth 190
- tracked vehicles 7795

Forestry practices
- biodiversity, Switzerland, conferences 6808
- water pollution, risk assessment, USA 3676

Forestry workers
- air pollution, ozone, health, Germany 5045
- costs, Slovenia 7710
- education, Canada 2535-2536
- Lyme disease, Italy 1649

- **Forestry workers** *cont.*
  - pollution, fallout, forest influences, Russia, Ukraine 8829
  - professional competence, training, Australia 6004
  - safety, health, Finland 3359
- **Forests**
  - air pollution, heavy metals, soil biology, Poland 343
  - carbon cycle
    - conferences 2478
    - greenhouse effect, carbon dioxide enrichment, international agreements 3341
    - USA 7071
  - classification, remote sensing, image interpretation, UK 2760
  - climatic change
    - hydrology, conferences 3305
    - simulation, North America, growth 3551
  - environment, biodiversity, economic development 40
  - environmental policy, international agreements, conferences, UN 769
  - fragmentation, birds, Passeriformes, Spain 4063
  - growth models, theory 4205
  - history, China, railways, construction 7697
  - land classification
    - Canada 249-250, 256
      - forest ecology, forest inventories 253
      - forest inventories 252
    - forest management, Canada, forest ecology 251
  - landscape
    - fire suppression, USA, settlement 383
    - history, UK 5903
    - simulation, Canada 4097
  - marsupials
    - *Petrogale penicillata,* New Zealand, control, water pollution 1506
    - *Trichosurus vulpecula,* New Zealand, control, water pollution 1506
  - plant competition, simulation 5472
  - plant genetic resources, biodiversity, research 39
  - pollution, heavy metals, Germany 5339
  - remote sensing, image interpretation, shifting cultivation, India 2757
  - soil density, Finland 5238
  - soil pollution, pesticides, residues, Germany 305
  - valuation, nature conservation, computer techniques, UK 5892
  - vegetation, ecology, management, weed control, conferences 7638
- ***Forficula auricularia,*** insect pests, *Acacia longifolia,* Italy, damage, natural enemies 2369
- **Form factors** (*see also* Stem form, taper)
  - *Pinus sylvestris,* diameter, height, Poland 994
- ***Formica aquilonia,*** effects, birds, foraging, *Picea abies,* Sweden 5828
- ***Formica exsectoides,*** insect pests, forest trees, USA, control 666
- **Formicidae**
  - *Acacia terminalis,* seed dispersal, Australia 484
  - *Camponotus quadriceps, Endospermum labios,* Papua New Guinea, insect pests, interactions 1473
  - *Cecropia tessmanii,* symbiosis, plant morphology, plant nutrition 3716
  - forest ecology, Germany 8323
  - insects, *Eucalyptus,* controlled burning, Australia 378
  - *Neonauclea celebica,* mutualism, Indonesia 10027
  - *Neonauclea cyrtopoda,* mutualism, Indonesia 10027
  - *Quercus,* forests, Spain 9130
  - rain forests, forest ecology, Australia 623
  - sampling, tropical forests, Costa Rica 21
  - seed dispersal, mistletoes, Loranthaceae, forests, Colombia 1469
  - shrubs, seed dispersal, Italy 3830
- ***Forsythia***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- ***Forsythia giraldiana,*** taxonomy, plant morphology, habit, Poland 2115
- ***Forsythia intermedia***
  - cold resistance, flowers, buds, physiology 8757
  - foliage, lignans 8909
  - seeds, lignans 8909
- ***Forsythia suspensa***
  - cold resistance, flowers, buds, physiology 8757
  - foliage, lignans 8909
  - seeds, lignans 8909
- ***Forsythia viridissima***
  - foliage
    - colour, ornamental woody plants, Korea Republic 9310
    - lignans 8909
  - seeds, lignans 8909
  - shoot cuttings, soil toxicity, aluminium, growth 9710
- ***Fouquieria columnaris,*** palaeobotany, pollen analysis, Mexico 8147
- **France**
  - *Abies,* silvicultural characters, provenance trials 833
  - *Abies alba*
    - forest decline
      - dendrochronology, air pollution, climate 2091
      - fertilizers, plant nutrition, soil fertility 890
    - water stress, plant physiology, climate 4515
  - *Aesculus hippocastanum,* electrical phenomena in trees, measurement, sap flow 2081
  - afforestation, agricultural land, land use 9253
  - agroforestry 5881-5882
    - broadleaves, forest plantations, pastures, trials 5880
    - equilibrium 5887
  - *Alnus rubra,* provenance trials, increment 836
  - birds, riparian forests, plant succession 5824
  - bottomland forests, nature reserves, reclamation 3281
  - broadleaves
    - coppice
      - plant succession 4317
      - research, growth, ecology 8614
    - forest decline 1297, 3817
    - forest litter, soil organic matter, carbon cycle, measurement 5240
    - forest plantations, pastures, establishment, trials 5880
    - height, diameter, equations 4405
    - natural regeneration, selection forests, canopy gaps 5124
    - plant nutrition, riparian forests, flooding 3640
  - *Castanea sativa*
    - agroforestry, coppice, management 5877
    - coppice, biomass production, equations 4398
  - coastal areas, nature conservation, administration 736
  - conifers
    - air pollution
      - forest health, history 3673
      - measurement 1160
    - bark, stemflow, pH, conductivity 3021
    - choice of species, afforestation, altitude 9421
    - foliage, colour, forest decline, fertilizers 2610
    - forest decline
      - forest management 3822
      - mountain forests, air pollution 3814
      - soil parent materials, geology 8943
    - forest plantations
      - cleaning 6932
- **France** *cont.*
  - conifers *cont.*
    - forest plantations *cont.*
      - silviculture, grazing 5876
    - protection forests, silviculture, mountain forests 5840
    - soil fertility, silvicultural systems 9711
  - coppice, logging, work study 6914
  - *Cupressus sempervirens*
    - pollen, allergens 54
    - variety trials, site factors, plant morphology 6020
  - deciduous forests
    - clear felling, natural regeneration 3959
    - plant succession, fields 3959
    - site types, analysis 1362
  - deer
    - *Capreolus capreolus*
      - *Abies alba,* natural regeneration, browsing damage 1740
      - broadleaves, browsing damage 1512
    - *Cervus elaphus*
      - *Abies alba,* natural regeneration, browsing damage 1740
      - broadleaves, ecology, stand characteristics 7538
      - browsing damage, sclerophyllous scrub 7525
  - ectomycorrhizas, *Lactarius, Fagus sylvatica,* morphology 5578
  - *Eucalyptus gunnii,* cold resistance, heritability, provenance, growth 9053
  - *Fagus sylvatica*
    - buds, shoots, biomass, development 4638
    - crown, development, light 6387
    - dendrochronology, forest decline, growth rings, increment 4991
    - forest decline 3816
      - forest management 3821
    - genetic variation, isoenzymes 581
    - ground vegetation, soil chemistry 3090
    - growth models, plant competition, light, water availability 4753
    - humus, soil biology, Oligochaeta, variation 7877
    - logging, forest economics, profitability 9653
    - pollination, outcrossing 4730
    - stem form, eccentricities, genetic variation 5519
  - fertilizers, sewage sludge, legislation 8593
  - fire prevention, land use planning, Mediterranean Region, books 7621
  - forest decline
    - air pollution, legislation, research, reviews 1159
    - aluminium, toxicity, plant nutrition, reviews 4717
    - conferences 3312
    - forest health, monitoring 3818
    - forest management, insect pests, fungal diseases, interactions 3819
  - forest economics
    - forest management, investment 2785
    - logging, labour contracts 9407
    - taxes, inheritance tax 9645
  - forest inventories, remote sensing, satellites, methodology, testing 4449
  - forest management
    - biodiversity 9611
    - education 9403
    - forest ecology 8717
    - planning, natural regeneration, methodology 1017
  - forest plantations, silviculture, growth 932
  - forest recreation, urban areas, surveys 1585
  - forest resources, stand characteristics, coastal areas 9929
  - forest trees
    - agroforestry, afforestation, fields, research 7580
    - carbon dioxide enrichment, plant physiology, drought 4473

- **France** *cont.*
  - forest trees *cont.*
    - cycling, fertilizers 8779
    - dendrochronology, increment 3290
    - forest decline, coastal plant communities 3808
    - progeny testing, early selection, statistical analysis 1419
  - forestry
    - cooperatives 9659
    - greenhouse effect 2792
    - history 7693
    - information science, computer techniques 820
    - metallurgy, degraded forests, history 2519
    - training 1641
  - forests, grazing 5884
  - *Fraxinus excelsior*
    - branches, crown 6186
    - crown, morphology, growth models, measurement 9585
    - foliage, water stress 1936
  - fungal diseases
    - *Armillaria ostoyae, Pinus pinaster,* biological control 9127
    - Ascomycotina, *Pinus sylvestris,* water stress 1934
    - *Botryosphaeria dothidea, Sequoiadendron giganteum* 1460
    - forest health 6845
    - *Leptographium procerum, Pinus sylvestris,* damage 3165
    - *Melampsora larici-populina, Populus,* identification 10013
    - *Microsphaera vanbruntiana, Sambucus racemosa* 5660
    - *Mycosphaerella dearnessii, Pinus attenuata × Pinus radiata,* control 8309
    - *Ophiostoma ulmi, Ulmus,* spread, damage 4019
    - *Phoma, Fraxinus,* control 8286
    - *Seiridium cardinale, Cupressus sempervirens,* resistance 6020
  - glossaries, history 764
  - hedges
    - habitats, insects, *Abax parallelepipedus,* landscape ecology 7555
    - landscape, policy 5846
    - replanting, rural areas 5845
  - herbicides, weed control 8639
  - humus, soil classification, systems 1918
  - insect pests
    - *Curculio elephas, Castanea sativa,* ecology 2349
    - Curculionidae, disease vectors, fungal diseases 3186
    - *Dendroctonus micans*
      - *Picea abies* 652
        - biological control, *Rhizophagus grandis* 9185
        - biology, population dynamics 4890
    - *Dioryctria sylvestrella*
      - *Pinus pinaster*
        - damage 4882
        - pruning, population dynamics 2337
    - *Diprion pini*
      - *Pinus sylvestris*
        - foliage, taxifolin 4667
        - resistance, biology 627
    - *Erannis defoliaria, Quercus robur,* biology, population dynamics 2316
    - forest health 6845
    - forest trees, biological control 9184
    - *Graellsia isabellae, Pinus sylvestris,* resistance, biology 627
    - *Hylobius abietis*
      - *Pinus,* monitoring 5737
      - *Pinus sylvestris,* disease vectors, *Leptographium procerum* 3165
      - *Pseudotsuga menziesii,* control 2382

- **France** *cont.*
  - insect pests *cont.*
    - *Matsucoccus feytaudi*
      - *Pinus pinaster*
        - forest decline 4036
        - monitoring, pheromone traps 5700
        - resistance, provenance trials 9970
    - *Operophtera brumata, Quercus robur,* biology, population dynamics 2316
    - *Psylliodes ruficolor, Quercus ilex,* new species 659
    - Scolytidae, *Pinus sylvestris,* disease vectors 1934
    - *Thaumetopoea pityocampa, Pinus pinaster,* forest decline 4038
  - land use, afforestation 1544
  - *Larix,* forest plantations, agroforestry, research 7580
  - *Larix decidua,* forest plantations, history 2638
  - *Larix eurolepis,* genetic variation, shoot cuttings, rooting capacity 570
  - *Larix laricina,* provenance trials, site factors, waterlogging 4257
  - logging, forest economics 8746
  - mixed forests
    - forest health, silviculture 6864
    - forest influences, air pollution, monoterpenes 1187
    - selection forests, pruning 5152
  - mycorrhizas
    - conifers, forest nurseries, afforestation, plant nutrition 5576
    - *Laccaria laccata*
      - *Picea abies,* inoculation methods 4008
      - *Pseudotsuga menziesii,* forest nurseries, assessment 9992
  - *Picea abies*
    - cycling 1137
    - drought, plant water relations, transpiration, photosynthesis 5279
    - fertilizers, forest decline, growth 4303
    - forest decline
      - soil amendments, rhizosphere fungi 2228
      - soil chemistry
        - fertilizers, plant nutrition 4302
        - soil water 4488
    - forest influences, soil organic matter 3688
    - forest litter, decomposition, phenolic compounds 5259
    - forest plantations, forest influences, soil properties 1994
    - gas exchange, measurement, techniques, air pollution 7654
    - height, growth models, mountain forests 4204
    - humus, soil biology, altitude 3588
    - natural regeneration
      - allelopathy, understorey 2162
      - reviews 3437
      - site preparation, soil amendments 9492
    - nutrient deficiencies, magnesium, fertilizers, lime, acid soils 2856
    - protection forests, stand structure, natural disasters 10090
    - seedlings, allelopathy 3105
    - stems, growth models, morphology 5018
  - *Pinus*
    - agroforestry, amenity forests, management, forest fires 5877
    - forest decline, insect pests, fungal diseases 3815
    - genetic variation, selection criteria, silvicultural characters 9035
  - *Pinus halepensis*
    - coastal plant communities, salt spray, damage 6353
    - forest decline, salt spray 1172
    - silviculture, yield tables 6987
  - *Pinus nigra*
    - agroforestry, forest plantations, management 5877

- **France** *cont.*
  - *Pinus nigra cont.*
    - site class assessment, site factors, yields 2702
    - thinning, agroforestry, simulation, growth 9268
    - valuation, computer techniques 1050
  - *Pinus pinaster*
    - afforestation, reclamation, history 2407
    - air pollution, dust, ozone, deposition 4551
    - canopy
      - light penetration, solar radiation, measurement 4469
      - precipitation
        - simulation 701
        - stemflow, throughfall 700
    - forest decline
      - forest management 3810
      - frost injury, soil types 3567
    - forest inventories, stand characteristics, sampling 4433
    - forest litter, decomposition, soil organic matter, lipids 1913
    - forest plantations
      - canopy, precipitation, simulation 7679
      - spacing, growth, wood properties 6924
    - hybrids, heterosis, provenance trials, combining ability 9971
    - provenance, salt tolerance 4261
    - provenance trials 1675
      - growth, morphology, pest resistance 9970
    - remote sensing
      - canopy, chemistry 6226
      - radar
        - biomass, stand characteristics 3516
        - methodology 3514
        - stand structure 3520
    - tree breeding
      - genetic gain, increment 3977
      - progeny testing, heritability, increment 5496
  - *Pinus pinea,* forest plantations, agroforestry, research 7580
  - *Pinus sylvestris*
    - heathlands, agroforestry, tourism 5879
    - sapwood, foliage, plant water relations, climate 5284
    - slash, disposal, costs 6928
  - *Pinus uncinata*
    - increment
      - diameter, climate 7860
      - site factors 6968
    - wetlands, nature conservation 3915
  - plant succession, old fields, indicator species, Gastropoda 9950
  - *Platanus acerifolia,* pruning, carbohydrates, distribution, seasonal variation 5393
  - *Populus*
    - biomass production, photosynthesis 4401
    - shoot cuttings, weed control, herbicides 8632
    - short rotation forestry 6913
      - height, border effects 8700
      - site factors 6912
    - species trials, growth, disease resistance, phenology 8560
  - *Populus* 'Beaupré', coppice, silviculture, biomass production 149
  - *Populus canadensis,* bark, pectins, seasonal variation 3757
  - *Populus* 'I-214', growth effects, reaction wood, wood defects 4586
  - protection forests
    - geographical information systems, avalanches, landslides 3227
    - natural disasters, surveys 10089
  - *Prunus avium,* selection criteria, seed orchards 5521
  - *Pseudotsuga menziesii*
    - biomass, plant nutrition, stand development 7074

France *cont.*
- *Pseudotsuga menziesii cont.*
  - forest plantations, provenance, genetic variation, isoenzymes 5488
  - heritability, stem form 8215
  - seed orchards
    - mating systems
      - genetic variation 9038
      - pollen, dispersal 9039
  - site class assessment, increment 9543
  - thinning 6129
- *Quercus*
  - agroforestry, coppice, management 5877
  - coppice, research 8615
  - dendrochronology, climate, carbon dioxide enrichment, simulation 4466
  - earlywood, wood anatomy, vessels 4639
  - forest decline 3811-3812
  - landscape, remote sensing 3508
  - molecular genetics 2216
  - plant water relations, soil water 7952
  - population genetics 594
  - root systems, plant water relations, soil water 5280
  - silviculture
    - books 4159
    - wood properties, simulation 4588
  - water stress, drought resistance 2830
  - wood properties, genetic variation 4595
- *Quercus coccifera,* forest fires, cycling 4612
- *Quercus coccinea,* forest fires, garrigue, simulation 2921
- *Quercus ilex*
  - vegetation types, seed dispersal, birds, plant succession 3092
  - water stress, distribution 3610
- *Quercus petraea*
  - ground vegetation, soil chemistry 3090
  - thinning, plant water relations, effects 7066
- *Quercus pubescens,* thinning, agroforestry, simulation, growth 9268
- *Quercus pyrenaica,* bioclimate 1876
- *Quercus robur,* soil water, water stress, leaf water potential 1935
- *Quercus rubra,* books 4153
- *Quercus suber*
  - agroforestry, amenity forests, management, forest fires 5877
  - forest litter, decomposition, fauna 7930
- remote sensing
  - evapotranspiration, fire danger 244
  - radar, stand characteristics 9635
- riparian forests
  - biodiversity, conservation 4128
  - birds, species diversity 9206
- root nodules, *Frankia,* broadleaves, foliage, nutrients 1909
- sampling, forest health, monitoring 6994
- secondary forests, mountain areas 9928
- selection forests, stand characteristics 916
- selection system, economics 8603
- short rotation forestry
  - fallow
    - *Eucalyptus* 6101
    - *Populus* 6101
- soil types, soil formation, soil classification 1104
- *Sorbus,* silvicultural characters 957
- species trials, forest plantations, grazing 5884
- thinning, forest plantations, conifers, planning, forest economics 2654
- *Tilia cordata,* water stress, distribution 3610
- tree breeding, selection criteria 9025
- *Ulmus,* genetic variation, isoenzymes, taxonomy 5429
- *Vaccinium myrtillus,* forest litter, decomposition, phenolic compounds 5259
- volume tables, history, development 6961
- wildlife, private forestry, conservation 9202

France *cont.*
- woody plants, maquis, biomass distribution 2152

Frankia
- *Alnus hirsuta,* root nodules, Japan 9999
- nitrogen fixing bacteria, *Alnus cordata,* interactions, mycorrhizas, *Glomus* 9079
- root nodules
  - *Allocasuarina,* Uruguay, nitrogenase 1443
  - *Alnus firma,* Japan, inoculation 4010
  - *Alnus glutinosa* 8278
    - Netherlands, resistance 4852
    - nitrogen fixation 8264
    - UK, soil inoculation 2620
  - *Alnus rubra,* forest nurseries, USA, soil pH 2231
  - broadleaves
    - foliage, France, nutrients 1909
    - reviews 1447
    - USA 4848
  - *Casuarina* 6622
    - enzyme activity 2227
    - silt loam soils, New Zealand 3160
    - Uruguay, nitrogenase 1443
  - *Casuarina cunninghamiana*
    - nitrogen fixation 2230
    - seedling growth, soil types, phosphorus fertilizers 6904
  - *Casuarina equisetifolia*
    - roots, colonization 4011
    - seedlings, inoculation, testing 6624
  - *Casuarina glauca,* genetic transformation, roots, morphology 9994
  - *Coriaria nepalensis,* ultrastructure 3150
  - *Myrica gale,* haemoglobin 8269
- symbiosis, *Casuarina,* nitrogen fixation, trials 2232

Fraxinus
- afforestation, agricultural land, forest economics, Italy 158
- fungal diseases
  - *Phoma,* France, control 8286
  - USA, identification 3173
- insect pests
  - Hemiptera, Iran, natural enemies 635
  - USA, identification 3173
- mycoplasmal diseases, reviews 7408
- natural regeneration
  - stand characteristics, botanical composition, climatic change, Poland 7330
  - stand structure, botanical composition, development, Poland 7329
- wind damage, Netherlands 1062

Fraxinus americana
- bark, thickness, fire resistance, USA 1197
- browsing damage, seedling growth, light, USA 1520
- carbon dioxide enrichment, light, plant succession, USA 3099
- crown, competition, USA, growth 2692
- fungal diseases, *Verticillium dahliae,* USA 5655
- light, soil water, increment, USA 5181
- molecular genetics 5562
- mulches, herbicides, plant nutrition, Canada 5135
- mycoplasmal diseases
  - USA
    - chemical control 10022
    - epidemiology 5672
    - forest management 614
- natural regeneration, rights of way, cutting frequency, USA 1332
- plant physiology, drought, USA, plant ecological groups 8813
- plant succession, old fields, USA 4794
- seedlings, roots, Canada, morphology 9784
- weed control, herbicides, USA 942
- wildlife, *Microtus pennsylvanicus,* plant succession, USA 5811
- wind damage, stand structure, USA, growth 277

Fraxinus angustifolia
- bottomland forests, natural regeneration, wild pigs, agroforestry, Croatia 3268
- mountain forests, birds, ecology, Spain 8371
- seed germination, seed treatment, temperature 9439
- stand development, wetlands, Croatia, simulation 4807
- tissue culture, micropropagation 117

Fraxinus cubensis, rhizosphere, soil biology, microorganisms, Cuba 1107

Fraxinus excelsior
- air pollution
  - ozone, water use 2881
  - sulfur dioxide, salt injury, Europe 3644
- branches, crown, France 6186
- canopy, reflectance, UK, seasonal variation 6224
- crown, morphology, growth models, France, measurement 9585
- defoliation, shoots, phenology, growth 3711
- *Fagus sylvatica,* natural regeneration, plant competition, plant water relations, Germany 9781
- foliage, water stress, France 1936
- forest litter
  - decomposition
    - carbon dioxide enrichment, laboratory tests 5255
    - Germany 1915
      - branches, roots 2825
- forest nurseries, herbicides, UK, tolerance 2644
- forest plantations, pastures, establishment, trials, France 5880
- fungal diseases, *Inonotus hispidus,* wood anatomy 2968
- insect pests
  - *Eriophyes fraxinivorus,* Irish Republic 5682
  - *Euphydryas maturna, Viburnum opulus,* Sweden, parasitoids 5708
  - *Hylobius abietis,* feeding behaviour 5759
  - *Prays fraxinella*
    - UK 5707
      - feeding behaviour, dieback 8334
  - *Stereonychus fraxini,* host parasite relationships 5748
- insects, Lepidoptera, Finland, food plants 2299
- micropropagation, rooting, development 7733
- mined land, Germany, clay soils 1538
- mixed forests, natural regeneration, synecology, Poland 8179
- mycorrhizas, *Glomus,* micropropagation 5593
- natural regeneration, seed production, seed predation, UK 3031
- plant competition, increment, statistical analysis, Germany, mixtures 791
- plant nutrition, riparian forests, flooding, France 3640
- plant succession, synecology, Sweden 1397
- plantations, increment, Azerbaijan 1004
- pollen, allergens 7177
- provenance trials, Romania 8561
- seed dormancy, seed treatment, Poland 6875
- seed germination
  - seed treatment
    - storage 845, 851
    - temperature 9439
- seeds, mechanical properties, testing 405
- silvicultural conversion, mixtures, Austria 6940
- silvicultural systems, stand characteristics, Belgium 949
- silviculture, UK 4365
- species trials, forest plantations, grazing, France 5884
- stand characteristics
  - basal area, Romania 8661

Fraxinus excelsior *cont.*
- stand characteristics *cont.*
  - plant competition, yield tables, simulation 6832
- taxonomy, plant morphology, habit, Poland 2115
- tissue culture 2608
  - embryo culture, culture media 9454
- transpiration, estimation, hydrology, UK 3605
- transplanting, Germany 4979
- viral diseases, Germany 8318
- volume determination, remote sensing, radar, Netherlands 3518
- volume tables, Italy 6175
- wood anatomy
  - rays, wood strength 2968
  - wind, growth stress 7114
- wood chemistry, esters 1253
- wood properties, wood anatomy, methodology, boring 2494

Fraxinus mandshurica
- crown, canopy, plant morphology 8065
- wood anatomy
  - fibres, cell walls, reaction wood 6412
  - pits 2026
  - tension wood 8891
  - wood properties 7153

Fraxinus nigra, reproductive behaviour, floodplains, Canada 3834

Fraxinus ornus, seed germination, seed treatment, temperature 9439

Fraxinus pennsylvanica
- bare rooted stock, transplanting, water stress, antitranspirants, defoliation 5286
- floods, erosion, stand structure, Canada 3111
- foliage
  - development, pruning, Canada 2956
  - plant morphology, apical meristems 2044
  - water stress, plant hairs 2829
- frost resistance, climate, simulation, USA 800
- fungal diseases, *Verticillium dahliae,* USA 5655
- insect pests, *Podosesia aureocincta,* biological control, USA, entomophilic nematodes 4897
- linear plantations, water pollution, control, USA 9496
- mixtures, silviculture, Ukraine 1785
- nutrient reserves, USA, bottomland forests 3626
- phenology
  - roots, transplanting 5908
  - USA 6390
- plant competition, Canada 8988
- plant nutrition, nitrogen, enzymes, seedling growth 5289
- planting stock, USA, survival, growth 4309
- pruning
  - foliage, growth 4619
  - shoots, growth 4619
- reclamation, mined land, tillage, USA 4093
- remote sensing, canopy, atmosphere, energy relations, USA 1028
- roots
  - girdling, wire 1981
  - planting, soil texture, growth 2056
- seeds, mechanical properties, testing 405
- shoots, development, morphology, Canada 2947
- street trees
  - planting, water uptake 4510
  - pruning, USA, wood residues 4983
- taxonomy, plant morphology, habit, Poland 2115
- transplanting, USA, survival, seasonal variation 5907
- water stress, genotype environment interaction, adaptation, USA 2206
- weed control, USA, herbicides 8644

French Guiana
- broadleaves, plant water relations, gas exchange 4506
- *Dicorynia guianensis,* silvicultural characters, stand development 3706

French Guiana *cont.*
- forest trees, stand structure, growth 6985
- logging, tropical forests, canopy gaps, mortality 9533
- monkeys, *Alouatta seniculus, Chrysophyllum lucentifolium,* seed dispersal, interactions 7541
- rain forests
  - canopy, precipitation 9765
  - phenology 6388
- tropical forests
  - canopy gaps, stand development 6570
  - forest trees, roots, morphology, mycorrhizas 4640
  - light penetration, simulation 4214
- *Vouacapoua americana,* recruitment, seed dispersal, soil water regimes 6571

French Polynesia, *Santalum* 4168

Froesia diffusa, taxonomy, Amazonia 491

Frogs, wildlife, rain forests, Malaysia 9222

Frost injury
- *Acer saccharum,* plant composition, Canada, abscisic acid 278
- *Betula,* climate, North America 9672
- *Cornus florida,* parenchyma, ice, cavitation 275
- frost heave, forest trees, seedlings, reviews 4482
- *Picea abies*
  - foliage, chlorophyll, fluorescence 1280
  - photosynthesis, photoinhibition, light 5408
  - provenance trials
    - increment, Norway 9413
    - Sweden 7872
  - seedlings, light, methodology 3315
- *Picea rubens*
  - increment, USA 9677
  - solar radiation, aspect, USA 8763
- *Pinus lambertiana,* USA, wood, grading 1989
- *Pinus pinaster,* forest decline, soil types, France 3567
- *Pinus sylvestris,* increment, phenology, climatic change, simulation 7040
- *Populus simonii,* amenity trees, Estonia 5904
- *Pseudotsuga menziesii,* cold hardening, simulation, USA 1888
- *Quercus ilex,* plant water relations, cavitation, geographical distribution, Sicily 3613
- *Quercus petraea,* stems, assessment 4476
- *Salix viminalis,* plant physiology, statistical analysis 1064
- shelterwood system, natural regeneration, Sweden, monitoring, equipment 9333

Frost resistance
- *Abies alba,* foliage, mesophyll, ultrastructure, Slovakia 7150
- *Acer platanoides,* Canada 6250
- *Acer saccharum,* drought injury, sap flow, Canada 9676
- broadleaves
  - acclimatization, photosynthesis 1886
  - buds, dormancy, Canada 4477
  - climate, simulation, USA 800
  - plant succession, New Zealand 281
- *Chamaecyparis nootkatensis*
  - provenance, altitude, Canada 1083
  - stecklings, photoperiod, temperature 3563
- climatic change, phenology, simulation, Western Europe 2804
- conifers
  - acclimatization, photosynthesis 1886
  - photosynthesis, plant nutrition 8820
  - planting stock, storage, temperature 6087
  - roots, planting stock, cold storage 3558
- *Cornus sericea,* seasonal variation 272
- development, *Larix leptolepis,* seedlings, photosynthesis, light 9663
- *Eucalyptus*
  - progeny testing, genetic variation, Australia 8241

Frost resistance *cont.*
- *Eucalyptus cont.*
  - species trials
    - Lesotho 2547
    - South Africa 7722
- *Eucalyptus gunnii,* membranes 1893
- forest trees
  - roots, Russia 279
  - seedlings, simulation 9360
- fungal diseases, *Valsa sordida, Populus,* genetic variation 10009
- *Griselinia littoralis,* foliage, plant anatomy, New Zealand, damage 8761
- induction, *Pinus banksiana,* seedlings, enzymes, adenosinetriphosphatase 6476
- measurement, *Picea mariana,* methodology 786
- *Nothofagus menziesii,* foliage, plant anatomy, New Zealand, damage 8761
- *Phyllocladus,* genetic variation, isoenzymes, New Zealand 562
- *Picea abies*
  - air pollution, ozone, biochemistry 2882
  - lignification, provenance 7034
  - progeny testing, Norway 8210
  - provenance
    - foliage
      - air pollution
        - reviews 9679
        - UK 9679
  - tree breeding, progeny testing, phenology, Norway 568
- *Picea glauca,* provenance trials, Canada 1084
- *Picea mariana* 5234
  - forest nurseries, container grown plants 2803
- *Picea rubens*
  - acid deposition 3024
  - air pollution, ozone, USA 2864
- *Picea sitchensis*
  - acid deposition
    - age of trees, genetic variation 2887
    - UK, assessment 5317
- *Pinus*
  - forest nurseries
    - pruning, USA 273
    - wrenching, USA 273
- *Pinus halepensis,* air pollution, ozone 3646
- *Pinus sylvestris* 7039
  - acclimatization, measurement 3013
  - altitude, latitude, Sweden 5233
  - climatic change, Finland, simulation 5231
  - tree breeding, progeny testing 3131
- *Pittosporum eugenioides,* foliage, plant anatomy, New Zealand, damage 8761
- Podocarpaceae, foliage, Chile, lipids 274
- *Populus* 'Robusta', branches, chemistry, seasonal variation 2987
- *Prunus* 1894
- *Prunus avium,* genetic variation, buds 282
- *Quercus petraea,* provenance trials, phenology, UK 9412
- *Robinia pseudoacacia,* breeding programmes, Chile 7362
- seasonal variation, *Morus bombycis,* plant anatomy, plasma membranes 2805
- *Thuja plicata*
  - planting stock, Canada, plant morphology 1724
  - population genetics, seedling growth, USA 1429

Fruiting
- *Acacia,* climate, site factors, soil water, Australia 3707
- *Acrocomia aculeata,* flowering, Brazil 9880
- Arecaceae, synecology, Brazil 3060
- control, *Liquidambar styraciflua,* plant growth regulators, USA 7606
- deciduous forests, phenology, seasonality, Temperate Zones 8126
- Dipterocarpaceae, forests, selective felling, Peninsular Malaysia 8127

- **Fruiting** *cont.*
  - estimation, tropical forests, Uganda 2489
  - forest trees, phenology, flowering, Venezuela 5368
  - *Madhuca longifolia,* flowering, medicinal plants, India 988
  - *Phyllanthus emblica,* forest plantations, increment, India 1743
  - woody plants, rain forests, climate, Chile 2930
- **Fruiting potential,** estimation, *Eucalyptus deglupta,* Indonesia, equations 1613
- **Fruits** (*see also* Cones; Seeds)
  - Acanthaceae, India 503
  - anatomy
    - *Apodytes,* Southern Africa 2961
    - identification, Apocynaceae, taxonomy 7157
  - Arecaceae, oxalates 2971
  - *Cecropia latiloba,* fishes 9233
  - chemistry, forest trees, esters 1253
  - colour, treatment, *Gmelina arborea,* seed germination 861
  - development, *Ozoroa paniculosa* 3719
  - edible species, cooking, palatability 1810
  - Fabaceae
    - Caesalpinioideae, seeds, phylogeny, taxonomy 8977
    - Mimosoideae, seeds, phylogeny, taxonomy 8977
  - *Garcinia kola,* edible species, nutritive value 8921
  - *Ginkgo biloba*
    - coumarins 1235
    - plant composition 8674
  - *Hippophae rhamnoides,* plant oils, terpenoids 9812
  - *Iryanthera grandis,* chemistry, chalcones 8912
  - *Juglans regia,* genetic variation, isoenzymes, Italy, morphology 5554
  - *Juglans sinensis,* provenance, foliage, Korea Republic, morphology 9783
  - *Juniperus phoenicea,* essential oils, Italy 435
  - mixed forests, seed dispersal, New Zealand 486
  - morphology
    - *Albizia,* seeds, morphology, seed germination 6075
    - *Paraserianthes falcataria,* seeds, morphology, seed germination 6075
    - *Quercus rotundifolia,* taxonomy, Spain 1321
  - *Ocotea corymbosa,* chemistry, terpenoids 9839
  - *Ocotea vellosiana,* chemistry, alkaloids, flavonols 9836
  - *Orbignya phalerata,* rural economy, Brazil 7799
  - *Pistacia vera,* essential oils 9804
  - *Pittosporum,* taxonomy, New Caledonia, new species 9888
  - *Platycarya strobilacea,* Japan, chemistry, tannins 6462
  - *Podocarpus,* reproductive behaviour, South Africa 3836
  - predation, birds, *Stenocereus griseus,* Venezuela 6514
  - production
    - *Acacia nilotica,* fodder, Ethiopia 2670
    - *Acacia tortilis,* fodder, Ethiopia 2670
    - tannins, *Balsamocarpon brevifolium,* afforestation, Chile 6146
    - vegetation types, Puerto Rico 1309
  - *Sapindus saponaria,* medicinal plants, Brazil, saponins 9798
  - seeds, *Tectona grandis,* diameter, seed germination, India 846
  - survival, predation, rain forests, Australia 4050
- ***Fuchsia excorticata,*** mixed forests, seed dispersal, New Zealand 487
- **Fuel plantations**
  - afforestation, agricultural land, Europe 8553
  - agroforestry, Developing Countries 3363
  - climatic change, energy resources, Sweden 4471
  - *Eucalyptus tereticornis,* water conservation, water use, India 699
- **Fuel plantations** *cont.*
  - farm forestry, short rotation forestry, UK, books 7623
  - forest economics, Germany 4252
  - forest trees
    - choice of species, India 58
    - India 2540
  - irrigated stands, environmental protection, research, development projects, Kenya 6001
  - multipurpose trees
    - diameter, India, equations 1615
    - height, India, equations 1615
    - irrigated stands
      - biomass production, water use efficiency, Kenya 6021
      - stand density, increment, Kenya 6131
    - species trials, Nepal 6865
  - private forestry, Nepal 6011
  - *Prosopis juliflora,* irrigated stands, economics, Kenya 6242
  - reclamation, waste land, agroforestry, farm forestry, India 7558
  - short rotation forestry, Germany 4251, 6009
  - spread, utilization, *Prosopis juliflora,* charcoal, Kenya 6010
- **Fuels,** utilization, energy policy, forestry, legislation, Uruguay 8551
- **Fuelwood**
  - broadleaves, India, calorific value 3361
  - Burkina Faso, supply, economics 8552
  - consumption, India 8555
  - deforestation
    - forest nurseries, Malawi 3423
    - land use, Ghana 3362
  - development projects, international cooperation, Thailand, reports 760
  - energy resources, planning, degraded forests, India 57
  - *Eucalyptus tereticornis,* agroforestry, India 6726
  - *Leucaena leucocephala,* agroforestry, India 6726
  - multipurpose trees, species trials, India 1661
  - resources
    - deforestation, South Africa 8556
    - forest management, land use, South Africa 4253
    - management, Niger, development projects 8554
    - rural development
      - social forestry
        - India
          - books 7628
          - constraints 7628
  - scrub, Morocco, environmental degradation 7111
  - utilization, energy policy, forestry, legislation, Uruguay 8551
- **Fumigants** (*see also* Fungicides; Insecticides)
  - phostoxin
    - *Acacia,* seed germination, phytotoxicity 5781
    - *Dalbergia sissoo,* seed germination, phytotoxicity 5781
    - *Pinus roxburghii,* seed germination, phytotoxicity 5781
- **Fungal diseases**
  - *Acacia nilotica,* Tropics, damage 10031
  - *Acer macrophyllum,* Canada, mycoherbicides 8254
  - *Acer pseudoplatanus,* foliage, Germany 7405
  - *Alternaria, Eucalyptus globulus,* plant physiology 3771
  - amenity trees
    - Pakistan, seeds 2257
    - UK, books 6
  - *Anisogramma anomala, Corylus avellana* 8312
  - *Apiognomonia errabunda, Fagus sylvatica,* infection 5664
  - *Apiognomonia veneta, Platanus acerifolia,* USA, disease resistance 2284
  - *Armillaria*
    - Netherlands, distribution 5627
- **Fungal diseases** *cont.*
  - *Armillaria cont.*
    - *Picea abies*
      - Germany 1451
      - thinning, Sweden 5625
    - *Pinus contorta,* oleoresins, increment 7206
    - *Pinus radiata,* New Zealand 4017
  - *Armillaria cepistipes, Quercus petraea,* Hungary 2267
  - *Armillaria mellea, Pinus contorta,* resistance, *Dendroctonus ponderosae* 7205
  - *Armillaria novae-zelandiae, Pinus radiata,* New Zealand 4860
  - *Armillaria ostoyae*
    - Canada, control, machinery 5160
    - conifers, thinning, USA 10008
    - *Pinus,* USA, population structure 9094
    - *Pinus pinaster,* biological control, France 9127
    - *Pinus resinosa,* USA, population genetics 2261
  - *Ascocoryne cylichnium, Picea abies,* fatty acids, sterols 2259
  - Ascomycotina, *Pinus sylvestris,* water stress, France 1934
  - *Aulographina eucalypti, Eucalyptus,* Madagascar, foliage 7403
  - Basidiomycotina
    - *Fagus sylvatica,* temperature 4861
    - *Larix leptolepis,* Japan, site factors, soil 6626
  - *Biscogniauxia nummularia, Fagus sylvatica,* water stress, Italy 9104
  - blue stain, *Pinus taeda,* USA, pathogenicity 7399
  - *Botryodiplodia theobromae*
    - conifers
      - seeds
        - reviews 603
        - South Africa 603
    - *Pinus caribaea,* Venezuela, blue stain 2285
    - *Pinus elliottii,* seeds, USA 4016
  - *Botryosphaeria dothidea, Sequoiadendron giganteum,* France 1460
  - *Botryosphaeria ribis, Juglans,* Italy 2273
  - *Botrytis cinerea*
    - *Eucalyptus,* India 8293
    - *Eucalyptus globulus,* plant physiology 3771
    - *Picea mariana*
      - biological control, microorganisms 2256
      - seedlings, infection, microclimate 1449
      - stress, disease resistance, control 1450
  - *Burenia myrrhidendri, Myrrhidendron donnell-smithii,* Costa Rica, fruits 9121
  - *Calonectria quinqueseptata*
    - *Eucalyptus,* Madagascar, foliage 7403
    - *Eucalyptus tereticornis*
      - India
        - agroforestry 7402
        - climatic factors 7402
  - cankers, *Ocotea whitei,* Panama 2272
  - *Capnodendron, Adansonia digitata,* plant disorders, Zimbabwe 7203
  - *Castanea sativa*
    - Switzerland 184
      - coppice, fungi 5617
  - *Ceratocystiopsis minima, Pinus,* Cuba 1458
  - *Ceratocystis*
    - *Pinus caribaea,* Cuba 1458
    - *Quercus robur,* Poland, forest decline, control 1299
    - taxonomy 2264
  - *Ceratocystis brunneo-crinita, Pinus,* Cuba 1458
  - *Ceratocystis fagacearum*
    - *Quercus*
      - Europe, spread 8299
      - USA 1459
        - control 3170
        - resistance 4862

- **Fungal diseases** *cont.*
  - *Ceratocystis fagacearum cont.*
    - *Quercus virginiana*
      - tree breeding, USA 1457
      - USA, control 4877
  - *Ceratocystis fimbriata*
    - *Platanus*
      - Europe, spread 8299
      - street trees, Europe 5646
    - *Platanus acerifolia*
      - histology, defence mechanisms 2268
      - seedlings, histochemistry 2275
    - *Populus,* clones, disease resistance, plant physiology 7404
  - *Chloroscypha seaveri, Cryptomeria japonica,* Japan, ecology, pathogenicity 9116
  - *Coccomyces guizhouensis, Pinus armandii,* China 2253
  - *Coccomyces keteleeriae, Keteleeria fortunei,* China 2253
  - *Cochliobolus lunatus, Acacia nilotica,* forest nurseries, India 9085
  - *Colletotrichum dematium, Fagus crenata,* natural regeneration, Japan 4853
  - conferences 3311
  - conifers
    - forest nurseries, Finland 5619
    - USA, spread, imports 2303
  - *Coriolus versicolor, Platanus acerifolia,* injuries, inoculation 8290
  - *Corticium salmonicolor, Eucalyptus camaldulensis,* Bangladesh, cankers 6633
  - *Cronartium comandrae*
    - *Pinus contorta*
      - oleoresins, increment 7206
      - resistance, *Dendroctonus ponderosae* 7205
  - *Cronartium conigenum, Pinus maximinoi,* cones, Guatemala, histology 9090
  - *Cronartium flaccidum, Pinus,* tissue cultures, disease resistance 9112
  - *Cronartium fusiforme*
    - *Pinus*
      - plant composition, monoterpenoids, resistance 9107
      - silviculture, USA 10021
      - USA, assessment 3167
    - *Pinus elliottii*
      - silviculture, USA 4024
      - simulation, USA 7676
      - USA, resistance 2188
    - *Pinus taeda*
      - forest nurseries, control 4025
      - tree breeding, USA 7346
      - USA, population genetics 2274
  - *Cronartium ribicola*
    - *Pinus albicaulis*
      - forest decline, USA 470
      - natural regeneration, USA 9105
    - *Pinus cembra,* Romania, hybrids, disease resistance 2186
    - *Pinus lambertiana,* disease resistance, molecular genetics 9114
    - *Pinus wallichiana,* genetic resistance, progeny testing 5490
  - *Cryphonectria parasitica*
    - *Castanea,* enzyme activity 9109
    - *Castanea dentata*
      - hypovirulence 9110
      - North America 9108
      - USA 8302
        - hypovirulence 6635
    - *Castanea sativa*
      - aerial photography, Switzerland 7854
      - biological control
        - Europe 7412
        - Italy, hypovirulence 9126
        - Slovakia 8321
      - Germany 5648
      - Italy, grafting 6634
  - *Curvularia, Eucalyptus,* Indonesia, control 2280
  - *Cyclaneusma, Pinus radiata,* genetic variation, New Zealand 4818, 4821
  - *Cyclaneusma minus, Pinus radiata,* New Zealand 4872

- **Fungal diseases** *cont.*
  - *Cylindrocladium scoparium*
    - *Pinus resinosa,* seedlings, biological control 9124
    - *Pterocarpus santalinus,* India, foliage 610
  - *Cytospora, Picea pungens,* USA 4866
  - *Daedaleopsis flavida,* broadleaves, tropical forests, India 6627
  - damage, Canada 8543
  - damping off, *Pinus,* seed germination, seedling growth, acid deposition 10004
  - decay fungi, *Picea abies,* Switzerland 6628
  - defence mechanisms, *Acer pseudoplatanus,* nuclear magnetic resonance imaging 5011
  - Deuteromycotina, *Abies sibirica,* disease vectors, *Monochamus urussovii* 10046
  - Diaporthales, *Eucalyptus grandis,* pathogenicity 2271
  - *Diplodia, Pinus radiata,* genetic variation, New Zealand 4818
  - *Diplodia pinea*
    - conifers, Netherlands 1453
    - *Cupressus sempervirens,* Israel, antifungal agents 6629
    - *Pinus* 10012
    - *Pinus radiata,* South Africa, hail damage, insect pests 7038
    - *Pinus sylvestris,* resistance, screening 8294
  - *Diplodia taxi, Taxus baccata,* New Zealand 5650
  - *Discula*
    - *Cornus florida*
      - acid deposition, foliage, morphology 2279
      - histology 2278
  - *Discula campestris*
    - *Acer saccharum*
      - USA 5658
        - control 2254
  - *Discula destructiva*
    - *Cornus*
      - ornamental woody plants, USA, resistance 8311
      - reviews 7406
    - *Cornus florida*
      - irrigation, USA 4868
      - USA, statistical analysis 9351
  - *Discula quercina, Quercus garryana,* USA, infection 5656
  - disease resistance, mycorrhizas, *Pinus nigra,* seedlings 9077
  - *Dothiorella, Metrosideros excelsa,* New Zealand 4075
  - *Dothiorella gregaria, Populus,* pruning, plant growth regulators, control 9086
  - *Endocronartium harknessii*
    - in vitro culture, *Pinus ponderosa* 2282
    - *Pinus banksiana,* thinning, Canada, distribution 6632
    - *Pinus contorta,* Canada, resistance 5641
  - *Endocronartium pini*
    - *Pinus,* UK, inoculation, infection 9119
    - *Pinus sylvestris*
      - Finland 4022
        - disease vectors, insect pests 5752-5753
  - endophytes, forest trees, Italy, reviews 6625
  - *Fomes fomentarius* 9093
    - *Platanus acerifolia,* injuries, inoculation 8290
  - *Fomitopsis pinicola, Abies religiosa,* Mexico 7397
  - forest decline, forest management, France, insect pests, interactions 3819
  - forest health, France 6845
  - forest nurseries, insect pests, Portugal 4160

- **Fungal diseases** *cont.*
  - forest trees, biological control, *Trichoderma harzianum,* enzymes 7409
  - *Fraxinus,* USA, identification 3173
  - *Fusarium*
    - *Eucalyptus urophylla,* Indonesia, chemical control 1502
    - *Pinus nigra,* forest nurseries, Italy, control 1467
    - *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
    - *Pterocarpus indicus,* Malaysia, chemical control 7410
    - *Robinia pseudoacacia*
      - edaphic factors 8297
      - India 2255
    - *Thyrsostachys siamensis,* thinning, disease resistance, Thailand 1775
  - *Fusarium oxysporum*
    - *Acacia holosericea,* India 2251
    - *Eucalyptus globulus,* plant physiology 3771
    - *Pterocarpus indicus,* Singapore 8296
  - *Fusarium pallidoroseum, Moringa oleifera,* India 8303
  - *Fusarium solani, Pinus roxburghii,* biological control 2292
  - *Fusarium subglutinans,* conifers, USA 5645
  - *Fusarium subglutinans* f.sp. *pini, Pinus radiata,* USA, disease vectors 7400
  - *Ganoderma sculptrutum, Eucalyptus grandis,* provenance, Zimbabwe, susceptibility 9098
  - *Gibberella, Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
  - *Gibberella fujikuroi* var. *subglutinans*
    - *Pinus,* Japan, geographical distribution, pathogenicity 3166
    - *Pinus taeda,* air pollution, ozone, disease resistance 8831
  - *Gloeosporidina cryptomeriae, Cryptomeria japonica,* Japan, damage, symptoms 4864
  - *Glomerella cingulata*
    - *Acacia holosericea,* India 2251
    - *Dalbergia sissoo,* culture media 2283
    - *Lupinus arboreus,* New Zealand 5649
  - *Graphium, Picea abies,* Norway, insect pests, disease vectors 10014
  - *Gremmeniella,* conifers, treelines, Switzerland 6762
  - *Gremmeniella abietina*
    - conifers 4169
    - defence mechanisms, laboratory tests 9091
    - *Pinus contorta,* Sweden 4867
    - *Pinus sylvestris*
      - acid deposition 8304
      - air pollution, Europe, damage 9118
      - Finland 5639-5640, 10010
        - insect pests, pest resistance 660
      - pollution 9117
      - stand density, Finland 1461
  - *Guignardia aesculi, Aesculus hippocastanum,* Austria 9158
  - *Guignardia candeloflamma*
    - Arecaceae, Indonesia 8307
    - *Pinanga,* Australia 8307
  - *Harknessia hawaiiensis, Eucalyptus,* Madagascar, foliage 7403
  - *Helminthosporium, Eucalyptus,* Indonesia, control 2280
  - *Heritiera utilis,* Africa, damage, surveys 10030
  - *Heterobasidion annosum*
    - *Abies*
      - USA 607
        - control 615
    - *Abies alba,* Italy 608
    - *Abies amabilis,* Canada 2263
    - *Abies religiosa,* Mexico 7397
    - conifers
      - USA 606
        - spread 9095

Fungal diseases *cont.*
- *Heterobasidion annosum cont.*
  - defence mechanisms, laboratory tests 9091
  - *Picea,* UK, resistance 4571
  - *Picea abies*
    - cell culture
      - callus 8258
      - plant physiology 447
    - defence mechanisms 5629
    - Denmark, control 10005
    - Germany 4859
    - thinning, Sweden 5624-5625
  - *Picea sitchensis*
    - spread 2262
    - UK 2263
      - control, economics 3169
  - *Pinus,* resistance, enzymes 5628
  - *Pinus resinosa,* Canada 9101
  - *Pinus sylvestris*
    - Poland, resistance, natural regeneration 1454
    - roots, decay, anatomy 7396
    - UK, damage 9099
  - Sweden, resistance 9102
- *Hypoxylon mammatum, Populus tremuloides,* USA, disease vectors 10011
- *Inonotus hispidus, Fraxinus excelsior,* wood anatomy 2968
- *Irpicomyces cornicola, Cornus florida,* Japan 2252
- *Khaya,* Côte d'Ivoire, damage 6647
- *Kirramyces epicoccoides, Eucalyptus,* Madagascar, foliage 7403
- *Laetiporus sulphureus,* Slovakia, spore dispersal 5630
- *Larix leptolepis*
  - biology 2260
  - stems, Japan, damage 4858
- *Lasiodiplodia, Prosopis,* USA 10003
- *Leptographium procerum, Pinus sylvestris,* France, damage 3165
- *Lindera triloba,* Japan, Scolytidae, ecology, symbiosis 4887
- *Lophodermella sulcigena, Pinus sylvestris,* Finland, detection 7663
- *Lophodermium pinastri, Pinus resinosa,* Canada 5657
- *Lophodermium seditiosum, Pinus sylvestris,* cell culture, metabolites, stilbenes 3762
- *Melampsora*
  - *Populus,* Belgium, research 611
  - *Populus trichocarpa,* tree breeding, resistance 3999
  - *Salix,* hybrids, resistance 5524
  - *Salix burjatica,* UK 2276
  - *Salix viminalis,* UK 5647
- *Melampsora larici-populina*
  - *Populus*
    - France, identification 10013
    - plant physiology, resistance 1463
- *Melampsora medusae*
  - conifers, USA 5659
  - *Populus*
    - genetic resistance 5517
    - USA, mortality 4871
  - *Populus deltoides,* genetic variation, resistance 4873
- *Melampsora populnea*
  - *Pinus pinaster,* phenology, provenance, host parasite relationships 4256
  - *Populus tremula,* Italy 609
- *Melampsoridium betulinum, Betula tortuosa,* Finland, acid deposition, heavy metals 5652
- *Microsphaera alphitoides, Quercus robur,* Netherlands, acid deposition 3655
- *Microsphaera penicillata, Platanus acerifolia,* USA, disease resistance 2284
- *Microsphaera syringae, Syringa vulgaris,* USA, control 4876
- *Microsphaera vanbruntiana*
  - *Sambucus racemosa*
    - France 5660
    - Spain 5660
- *Mycosphaerella, Eucalyptus globulus,* Australia, resistance 4869

Fungal diseases *cont.*
- *Mycosphaerella dearnessii*
  - *Pinus*
    - China, isolates, differentiation 9120
    - USA, isolates, differentiation 9120
  - *Pinus attenuata* × *Pinus radiata,* France, control 8309
- *Mycosphaerella heimii, Eucalyptus,* Madagascar, foliage 7403
- *Mycosphaerella pini*
  - *Picea omorika,* Serbia 5653
  - *Pinus radiata*
    - Australia, disease vectors 6664
    - New Zealand 4872
  - *Pseudotsuga menziesii,* Serbia 5653
- *Mycosphaerella populorum, Populus* 'DN34', air pollution, ozone, disease resistance 5644
- *Nectria*
  - deciduous forests
    - Canada 1462
    - USA 1462
  - *Fagus,* North America, epidemiology 7401
- *Nectria cinnabarina,* broadleaves, USA, chemical control, testing 2293
- *Nectria fuckeliana, Picea abies,* fatty acids, sterols 2259
- *Nectria rigidiuscula, Toona ciliata,* Argentina 8305
- *Neobulgaria premnophila, Picea abies,* fatty acids, sterols 2259
- *Nigrospora sphaerica, Artocarpus heterophyllus,* Bangladesh, foliage 6636
- *Nothofagus pumilio,* Argentina, damage 8288
- *Ophiostoma*
  - *Picea abies,* Norway, insect pests, disease vectors 10014
  - *Pinus contorta,* Canada, insect pests, *Dendroctonus* 6637
  - *Quercus,* forest decline, Europe 4020
  - taxonomy 2264, 5636
  - *Ulmus*
    - Europe, spread 8299
    - UK, disease vectors 5633
  - *Ulmus minor,* foliage, chemistry, ceratoulmin 2269
  - *Ulmus wallichiana,* India 5634
- *Ophiostoma himal-ulmi,* new species, *Ulmus wallichiana,* India 8295
- *Ophiostoma novo-ulmi*
  - *Ulmus,* pathogenicity 4018
  - *Ulmus glabra,* Norway, vectors 2346
  - *Ulmus procera,* Portugal 9103
- *Ophiostoma polonicum*
  - *Picea abies*
    - Norway
      - disease vectors, *Ips typographus* 10015
      - pruning
        - plant physiology 10015
        - resistance 10015
- *Ophiostoma querci, Quercus,* cavitation 4511
- *Ophiostoma roboris, Quercus robur,* Europe 7398
- *Ophiostoma ulmi*
  - *Ulmus*
    - Australia 4980
    - biological control 10023
    - France, spread, damage 4019
    - resistance, tree breeding, reviews 5565
    - susceptibility, testing 5012
    - tissue culture, callus, resistance 5635
  - *Ulmus americana*
    - susceptibility, testing, tissue culture 4863
    - USA, hybrids, resistance 1456
- *Penicillium vermoesenii, Washingtonia filifera,* infection, injuries 2258
- *Pestalotia, Eucalyptus,* Indonesia, control 2280
- *Pestalotiopsis, Prosopis,* USA 10003
- *Pestalotiopsis funerea, Thuja orientalis,* Italy 2266

Fungal diseases *cont.*
- *Pestalotiopsis versicolor, Artocarpus heterophyllus,* Bangladesh, foliage 6636
- *Phacidium infestans*
  - conifers, treelines, Switzerland 6762
  - *Pinus sylvestris,* mortality, stand density 5665
- *Phaeocryptopus gaeumannii, Pseudotsuga menziesii,* Netherlands, spread 1464
- *Phaeolus schweinitzii*
  - *Larix leptolepis,* Japan, damage 4857
  - *Pinus nigra,* tissue culture, defence mechanisms 8287
- *Phellinus pilatti, Populus alba,* Italy, damage, new species 10006
- *Phellinus torulosus, Cupressus sempervirens,* Italy 5626
- *Phellinus tremulae*
  - *Populus tremula,* Sweden, population genetics 8289
  - *Populus tremuloides*
    - Canada 8345
    - galls, Canada 5623
- *Phellinus weirii*
  - *Pseudotsuga menziesii*
    - Canada, control 9100, 9125
    - grafting, plant composition, disease resistance 1455
    - stand characteristics, USA 4856
    - urea fertilizers, USA 4299
- *Phoma, Fraxinus,* France, control 8286
- *Phoma etheridgei, Populus tremuloides,* Canada, antagonism, *Phellinus tremulae* 8300
- *Phoma herbarum, Ixora singaporensis,* India, new host records 9115
- *Phomopsis occulta, Picea pungens,* USA 8298
- *Phyllactinia dalbergiae, Dalbergia sissoo,* India 2281
- *Phytophthora*
  - *Abies procera,* Christmas trees, USA 9097
  - *Castanea sativa,* tissue culture, resistance 6892
  - *Eucalyptus*
    - South Africa 8291
      - reviews 1452
  - *Pinus*
    - South Africa 8291
      - reviews 1452
  - *Quercus robur,* forest decline, Germany 8292
- *Phytophthora cambivora, Alnus,* UK, distribution 3164
- *Phytophthora cinnamomi*
  - *Banksia attenuata*
    - Australia 9096
      - chemical control 8320
  - endangered species, forest management, Australia 7395
  - *Eucalyptus globulus*
    - enzymes 8272
    - plant physiology 3771
    - roots, enzymes 3772
  - *Pinus,* USA, damage 5057
  - sclerophyllous forests, natural regeneration, Australia 3954
- *Picea abies*
  - forest decline, nutrient deficiencies, Austria 8117
  - Sweden, statistics 10007
- *Pinus,* forest plantations, Croatia 4855
- *Pinus elliottii,* seeds, USA 9089
- *Pinus sylvestris*
  - disease vectors, *Hylobius abietis* 5757
  - natural regeneration, damage, deer, Finland 10061
  - seeds, pathogenicity 9088
- *Pistacia integerrima,* India, foliage 3168
- *Pithya cupressina, Juniperus,* Germany, damage 9113
- *Platanus acerifolia,* pollarding, Germany 7607
- *Platanus occidentalis,* foliage, infection 5651
- *Ploioderma hedgcockii, Pinus elliottii,* USA, histopathology 8310

- **Fungal diseases** *cont.*
  - *Populus*
    - Italy, integrated control, techniques 8319
    - Portugal, control 7411
  - *Populus deltoides,* forest nurseries, India, control 10024
  - *Pseudocercospora eucalyptorum, Eucalyptus,* Madagascar, foliage 7403
  - *Pyrenochaeta ligni-putridi, Picea abies,* Switzerland 5631
  - *Pythium*
    - *Eucalyptus*
      - South Africa 8291
        - reviews 1452
    - *Eucalyptus urophylla,* Indonesia, chemical control 1502
    - *Pinus*
      - South Africa 8291
        - reviews 1452
    - *Pinus nigra,* forest nurseries, Italy, control 1467
  - *Pythium dimorphum, Picea abies,* seedlings, plant physiology 9087
  - *Pythium irregulare, Pinus patula,* seedlings, South Africa 5622
  - *Pythium splendens, Eucalyptus grandis,* South Africa, pathogenicity 5632
  - *Quercus,* forest decline, drought resistance, Italy 8119
  - *Quercus ilex,* foliage, Europe 5654
  - *Quercus robur,* Switzerland, mixed infections 9092
  - *Ramichloridium pini, Pinus contorta,* UK 2270
  - *Ravenelia sessilis, Albizia chinensis,* forest nurseries, India 605
  - resistance, cones, proanthocyanidins 5621
  - *Rhizoctonia*
    - conifers
      - forest nurseries
        - Finland 5620
        - Norway 5620
    - *Pinus nigra,* forest nurseries, Italy, control 1467
    - *Pinus palustris,* USA, control 3171
  - *Rhizoctonia solani, Paulownia fortunei,* India, seedlings 3163
  - *Rhizosphaera kalkhoffii, Picea abies,* resistance 867, 6885
  - *Robinia pseudoacacia,* forest nurseries, biological control, Russia 10020
  - *Rosellinia desmazieresii, Salix repens* 8313
  - rust diseases, *Pinus contorta,* stand density, Canada 6631
  - *Seiridium*
    - *Cupressus lusitanica,* pruning, New Zealand 5638
    - *Cupressus sempervirens,* mycotoxins 8301
  - *Seiridium cardinale*
    - Cupressaceae, amenity trees, Germany 9111
    - *Cupressus sempervirens*
      - clones, resistance 6052
      - increment, Italy 9106
      - Italy, resistance, damage 4021
      - Mediterranean Region, resistance 6020
      - tree breeding, resistance, selection criteria 5512
  - *Seiridium unicorne*
    - *Chamaecyparis obtusa*
      - Japan, spread, damage 4865
      - resistance, age of trees 6630
    - *Cupressocyparis leylandii,* pathogenicity 5637
  - *Septoria, Populus trichocarpa,* tree breeding, resistance 3999
  - *Septoria populicola*
    - *Populus trichocarpa*
      - Canada 8308
      - USA 8308
  - stain fungi, *Pseudotsuga menziesii,* USA, disease vectors 5661
  - *Stegophora ulmea, Ulmus,* resistance, molecular genetics 8306
- **Fungal diseases** *cont.*
  - *Taphrina betulina*
    - *Betula pubescens*
      - increment, witches' brooms, UK 5663
      - UK 5662
  - *Taxus,* resistance, taxol 5616
  - *Trichoscyphella willkommii, Larix decidua,* resistance, testing 5642
  - *Uromyces truncicola, Sophora japonica,* Japan 2277, 5706
  - *Valdensinia heterodoxa,* Ericaceae, USA 4870
  - *Valsa sordida, Populus,* frost resistance, genetic variation 10009
  - *Verticillium dahliae*
    - *Cercis,* susceptibility 2265
    - *Fraxinus,* USA 5655
- **Fungi**
  - *Fagus sylvatica,* thinning, Slovakia 7383
  - isolation, *Cryptococcus, Eucalyptus,* human diseases, Colombia 7713
  - mangrove forests
    - China 7384
    - Hong Kong 7384
    - Macau 7384
  - *Pinus sylvestris,* forest litter, Germany, ecology 3143
  - species diversity, climax communities, Japan 3142
- **Fungicides**
  - mycorrhizas, *Glomus etunicatum, Eucalyptus grandis,* toxicity 602
  - nontarget effects, ground vegetation, *Pseudotsuga menziesii,* USA 6640
  - translocation, *Pseudotsuga menziesii,* USA 6639
- ***Funtumia elastica,*** rain forests, forest litter, chemistry, decomposition, Nigeria 3578
- ***Fusarium***
  - fungal diseases
    - *Eucalyptus urophylla,* Indonesia, chemical control 1502
    - *Pinus nigra,* forest nurseries, Italy, control 1467
    - *Thyrsostachys siamensis,* thinning, disease resistance, Thailand 1775
- ***Fusarium equiseti***
  - fungal diseases
    - *Robinia pseudoacacia*
      - edaphic factors 8297
      - India 2255
- ***Fusarium oxysporum***
  - fungal diseases
    - *Acacia holosericea,* India 2251
    - *Eucalyptus globulus,* plant physiology 3771
    - *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
    - *Pterocarpus indicus*
      - Malaysia, chemical control 7410
      - Singapore 8296
    - *Robinia pseudoacacia*
      - edaphic factors 8297
      - India 2255
- ***Fusarium pallidoroseum***
  - fungal diseases
    - *Moringa oleifera,* India 8303
    - *Robinia pseudoacacia*
      - edaphic factors 8297
      - India 2255
- ***Fusarium poae,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Fusarium solani***
  - fungal diseases
    - *Pinus roxburghii,* biological control 2292
    - *Pterocarpus indicus,* Malaysia, chemical control 7410
- ***Fusarium subglutinans,*** fungal diseases, conifers, USA 5645
- ***Fusarium subglutinans* f.sp. *pini,*** fungal diseases, *Pinus radiata,* USA, disease vectors 7400
- **Gabon**
  - elephants
    - *Loxodonta africana,* canopy gaps, tropical forests 684
- **Gabon** *cont.*
  - elephants *cont.*
    - *Loxodonta africana cyclotis, Sacoglottis gabonensis,* fruiting 3223
  - fungal diseases, *Heritiera utilis,* damage, surveys 10030
  - insect pests
    - Cerambycidae, *Heritiera utilis,* damage, surveys 10030
    - Cossidae, *Heritiera utilis,* damage, surveys 10030
  - *Tapura arachnoidea,* taxonomy, new species 9890
- ***Galerucella lineola,*** insect pests, *Salix,* attractants, phenolic compounds 7472
- ***Galipea dasysperma,*** taxonomy, Central America 3850
- **Galls**
  - bacterial diseases, *Pseudomonas syringae, Rhaphiolepis umbellata,* Japan, new species 2287
  - fungal diseases, *Phellinus tremulae, Populus tremuloides,* Canada 5623
  - insect pests
    - *Aceria parapopuli, Populus tremuloides,* Canada 8345
    - *Paranthrene tabaniformis, Populus,* Bulgaria, ecology 643
    - *Phyllocolpa, Salix,* keys 2366
    - *Schueziella fagicola, Fagus sylvatica* 7494
    - *Schueziella quercicola, Quercus robur,* Germany 7494
  - insects, *Schlechtendalia chinensis, Rhus chinensis,* China, biology 9132
  - mites, *Eriophyes,* broadleaves, India 2371
  - roots, anatomy, *Calamus rotang,* plant parasitic nematodes, embryo culture 8347
  - *Salix alba,* tissue culture 6881
- **Gambia,** mangrove forests, drought, effects 8760
- **Game** (*see* Birds; Wildlife)
- ***Ganoderma,*** fungal diseases, conferences 3311
- ***Ganoderma sculptrutum,*** fungal diseases, *Eucalyptus grandis,* provenance, Zimbabwe, susceptibility 9098
- ***Garcinia,*** rain forests, improvement planting, economics, Indonesia 4109
- ***Garcinia hombroniana,*** seeds, fatty acids, triacylglycerols 2974
- ***Garcinia kola,*** edible species, fruits, nutritive value 8921
- ***Garcinia scortechinii,*** plant nutrition, plant succession, Singapore 4543
- ***Garcinia subelliptica,*** roots, bark, xanthones 9810
- ***Gardenia jasminoides,*** wood anatomy, rays 2029
- ***Garrulus glandarius,*** birds, *Quercus,* seed dispersal, Germany 1307
- ***Garuga pinnata,*** vegetative propagation, indigenous knowledge, Nepal 6883
- **Gas exchange**
  - *Abies fraseri,* air pollution, ozone, seedlings 2888
  - *Acer saccharum,* carbon dioxide enrichment 2080
  - *Alnus incana,* root nodules, lipids, nitrogen fixation 5587
  - *Arbutus unedo,* light, plant competition, Spain 8753
  - *Betula papyrifera,* stomatal resistance, simulation, Canada 801
  - broadleaves
    - assimilation 4690
    - biomass production, plant water relations, plant nutrition, Spain 3793
    - drought, USA, plant ecological groups 8813
    - foliage, morphology, USA 4692
    - plant water relations, French Guiana 4506
  - carbon pathways, *Picea mariana,* genetic variation, increment, Canada 9041
  - *Castanea sativa,* carbon dioxide enrichment, NPK fertilizers, interactions 2069

Gas exchange *cont.*
- *Chamaecyparis nootkatensis*
  - planting stock, plant water relations, roots, Canada 4335
  - stecklings, photoperiod, temperature 3563
- climatic change, carbon dioxide enrichment, metabolism 5225
- *Copaifera langsdorfii,* plant water relations, water stress 5407
- *Cryptomeria japonica,* tree breeding, plant morphology 7186
- deciduous forests, simulation, USA 3328
- *Erythrina poeppigiana,* simulation, Costa Rica, growth, environmental factors 5411
- *Eucalyptus globulus*
  - genetic variation, water stress, Portugal 1930
  - light 468
  - ozone, growth, effects 6498
- *Eucalyptus grandis,* stockplants, light, quality, growth 5221
- *Fagus grandifolia,* carbon dioxide enrichment 2080
- *Fagus sylvatica,* foliage, carbon dioxide enrichment 1882
- forest trees
  - forest influences, carbon dioxide, Japan 7025
  - leaf water potential, drought, USA 4709
- isoprenoids, seasonal variation, *Populus tremuloides,* temperature, USA 4681
- measurement, techniques, *Picea abies,* air pollution, France 7654
- methane, *Pinus resinosa,* soil water, USA 4503
- *Nothofagus,* canopy, light, New Zealand, diurnal variation 4693
- *Picea abies*
  - air pollution, ozone 2885
  - carbon dioxide enrichment, enzymes 2082
- *Picea glauca,* cold storage, water stress, effects 6903
- *Picea mariana*
  - container grown plants, photosynthesis, water stress 4519
  - genetic variation, genotype environment interaction, Canada 9851
  - provenance, Canada 8931
- *Picea rubens*
  - heat tolerance, USA, geographical distribution 4478
  - plant nutrition, aluminium, toxicity, seedling growth 8819
- *Pinus,* ozone, water stress 3002
- *Pinus echinata*
  - acid deposition, USA 340
  - air pollution, ozone, USA 340
- *Pinus flexilis,* simulation, palaeoecology, USA 4706
- *Pinus jeffreyi,* ozone, resistance 3001
- *Pinus ponderosa*
  - foliage, ozone, carboxylation 6497
  - genetic variation
    - drought resistance, plant morphology, USA 1889
    - photosynthesis, transpiration, North America 8198
  - seedling growth, carbon dioxide enrichment, temperature 3552
- *Pinus resinosa,* ground vegetation, soil biology, Canada 7128
- *Pinus sylvestris,* air pollution, sulfur dioxide, Finland, simulation 6351
- *Pinus taeda,* carbon dioxide enrichment, USA, adaptation 8752
- *Populus,* foliage, movement 3785
- *Populus tremuloides,* stomatal resistance, simulation, Canada 801
- *Pseudotsuga menziesii*
  - air pollution 2862
  - genetic variation, photosynthesis, transpiration, North America 8198
- *Psychotria horizontalis,* genotype environment interaction, precipitation, Panama 1880

Gas exchange *cont.*
- *Quercus,* methodology 3318
- *Quercus robur,* carbon dioxide enrichment, photosynthesis, growth 6470
- *Quercus rubra,* foliage, ozone, seasonal variation 4703
- *Salix viminalis,* roots, electrical phenomena in trees 455
- seasonal variation
  - *Juniperus ashei,* precipitation, USA 1263
  - *Quercus virginiana,* precipitation, USA 1263
- *Sequoiadendron giganteum,* ozone, USA 2068
- *Taxodium distichum,* flooding, hypoxia, roots 1120

Gaultheria shallon
- fungal diseases, *Valdensinia heterodoxa,* USA 4870
- mycorrhizas, forest ecology, USA 6610
- natural regeneration, woody weeds, light 4348
- understorey, biomass, *Pseudotsuga menziesii,* thinning, Canada 3454

Gender relations, forest policy, forest management, multiple use, India 4238

Gene banks
- DNA, rain forests, endangered species 2174
- standards 9029

Gene expression
- *Betula pendula,* pollen, allergens 5542
- broadleaves, genetic engineering 7375
- *Casuarina glauca,* symbiosis 7376
- enzymes, *Populus kitakamiensis* 7369
- *Ginkgo biloba,* photosynthesis 5513
- *Picea abies,* histones 8230
- *Picea glauca,* somatic embryogenesis 7357
- *Pinus sylvestris,* seedlings, enzymes, light 3973
- *Pinus taeda,* cambium 5506
- *Populus deltoides,* bark, proteins, storage 5534
- proteins, *Betula pendula* 7368
- *Robinia pseudoacacia,* bark, lectins 2215

Gene flow
- *Acer saccharum,* USA 3986
- *Nothofagus menziesii,* dispersal, genetic variation, New Zealand 2212
- *Picea abies,* genetic variation 7360
- *Pinus sylvestris,* pollen, Sweden 5509

Gene mapping
- *Cryptomeria japonica* 8225
- *Pinus palustris* × *Pinus elliottii* 8229
- *Pinus pinaster* 8222
  - pollination 8228
- *Pinus taeda,* wood density 5508
- polymerase chain reaction, *Quercus macrocarpa,* USA 9061

Genetic defects, *Salix viminalis,* mathematics, methodology 589

Genetic diversity
- chloroplast genetics, *Quercus,* statistics, theory 7374
- forest plantations, tree breeding, reviews 8184
- forest trees, pollination, air pollution, climatic change, reviews 5424
- molecular genetics, *Juglans,* taxonomy 2223
- *Picea sitchensis,* seed orchards, Canada 3982
- *Pinus taeda*
  - breeding programmes
    - theory 7358
    - USA 7358
- *Pseudotsuga menziesii,* seed orchards, Canada 5065
- reviews, forestry practices 7334
- silvicultural systems, selection system, Switzerland 7334

Genetic engineering
- *Agrobacterium rhizogenes,* conifers, roots, development, morphology 3133
- broadleaves, gene expression 7375
- forest trees, tree breeding, tissue culture 8189

Genetic engineering *cont.*
- insect pests, Lepidoptera, *Populus,* resistance 5724
- male sterility, forest trees, reviews 7337
- *Picea mariana,* embryo culture, enzymes, β-glucuronidase 3975
- *Pinus thunbergii,* gene expression 5515
- *Populus tremuloides,* enzymes 2221

Genetic gain
- *Eucalyptus camaldulensis,* progeny testing, essential oils, Zimbabwe 2201
- growth models, simulation, USA, *Pinus ponderosa* 3337

Genetic improvement
- *Acacia senegal,* Sudan 3992
- *Eucalyptus,* tree breeding, conferences 4182
- *Juglans regia,* phenotypic selection, Italy 6031
- seed orchards, management, reviews 9430
- *Tectona grandis,* India 3991

Genetic markers
- *Eucalyptus,* clones, identification 5527
- forest trees, reviews 9028

Genetic polymorphism, inheritance, *Eucalyptus nitens* 5526

Genetic regulation, *Pinus sylvestris,* buds, plant physiology, seasonal variation, genetic transformation 5404

Genetic resistance, *Populus,* fungal diseases, *Melampsora medusae* 5517

Genetic resources
- *Acacia mangium,* Central America 1438
- *Atriplex,* choice of species, fodder, India 2556
- broadleaves, species trials, Arid Regions, conservation 1436
- canes and rattans, Bangladesh 1574
- *Castanea mollissima,* China 2218
- conservation
  - Canada 9026
  - forest trees
    - Colombia 3968
    - Europe, networks 2176
    - Tanzania, techniques 8236
  - selection system, natural regeneration 1418
- *Ficus,* taxonomy, Indonesia 8981
- fodder plants, India 3050
- forest resources, nature conservation, Brunei Darussalam 4965
- forest trees
  - Canada 7340
  - nature conservation, Chile 7335
- forestry
  - nature conservation 7590
  - research, Mediterranean Region 3970
- fruit trees
  - wild relatives
    - Asia 7366
    - Europe 7366
- fynbos, biodiversity, South Africa 530-531
- *Melaleuca,* afforestation, Vietnam 3990
- Oman 7339
- *Sesbania,* seed collection, international cooperation, Africa South of Sahara 3136
- *Taxus baccata,* botany, ornamental woody plants, reviews 1202
- tree breeding
  - Nicaragua, conservation 3969
  - population genetics, conservation, ethics 3308

Genetic transformation
- biolistics, conifers 6591
- *Casuarina glauca,* roots, morphology, root nodules, *Frankia* 9994
- conifers, pollen 7355
- *Eucalyptus globulus,* embryos 9063
- forest trees 7379
- gene expression, *Picea abies* 7356
- *Larix decidua,* insect pests, herbicides, resistance 4834
- *Picea abies*
  - cell suspensions 8231
  - techniques 9034
  - tissue culture 5502
- *Pinus,* tissue culture, reviews 6057
- *Pinus sylvestris,* tissue culture 4833

- **Genetic transformation** *cont.*
  - *Populus alba* × *Populus* 'Crandon', herbicide resistance, glyphosate, photosynthesis, increment 6605
  - *Populus tremula* × *Populus alba*, foliage, enzymes 5543
  - reviews 4812
- **Genetic variance**
  - heritability, *Pinus elliottii*, statistical analysis 8507
  - tree breeding, breeding programmes, seedlings, clones, simulation 9967
- **Genetic variation**
  - *Abies alba*, palaeoecology, Switzerland 7343
  - *Abies concolor*, wood anatomy, USA 5387
  - *Abies fraseri*
    - Christmas trees
      - increment, USA 3125
      - quality, USA 3125
  - *Acacia*, stomata, taxonomy 4648
  - *Acacia nilotica*
    - foliage, chemistry, provenance, India 3141
    - nitrogen fixation 5561
    - provenance trials, India 9414
  - *Acer rubrum*, seed dormancy, USA 7725
  - adaptation, *Nothofagus*, geographical distribution, hybrids, Chile 6386
  - alloenzymes
    - *Fagus sylvatica*, stem form, eccentricities, Europe 5519
    - *Picea abies*, Latvia 7342
  - *Alnus rubra*, plant physiology, Canada 5478
  - *Atriplex halimus*, fodder, biomass production, Mediterranean Region 1676
  - bacterial diseases, *Agrobacterium tumefaciens*, *Pinus radiata*, resistance 5666
  - bamboos, *Bambusa pallida*, tree breeding, India 1433
  - *Betula pendula*
    - air pollution, ozone, biochemistry 2880
    - root systems, UK 1439
    - shoots, phenology, temperature 8041
  - *Castanea sativa*, evolution, Europe 1437
  - chloroplast genetics
    - *Andira*, phylogeny, taxonomy 6600
    - *Populus* 7370-7371
    - *Populus canadensis*, hybrids 7372
    - restriction fragment length polymorphism, *Pseudotsuga menziesii*, Canada 4827
  - clonal variation, *Picea sitchensis*, wood density, Denmark 567
  - *Cryptomeria japonica*
    - clones
      - wood anatomy 6587
      - wood chemistry, Japan 7341
    - wood moisture, heartwood, Japan 6592
    - wood properties
      - clones, spacing 9758
      - Japan 560
  - *Cupressus bakeri*
    - cones, taxonomy, USA 2198
    - foliage, taxonomy, USA 2198
    - USA, terpenoids 2195
  - *Dendropanax morbifera*, provenance, Korea Republic, foliage, morphology 8238
  - environment, stress factors, reviews, Europe 6583
  - *Eucalyptus*
    - Australia, insect pests, defoliation 7461
    - progeny testing, frost resistance, Australia 8241
  - *Eucalyptus globulus*
    - foliage, morphology, Australia 5556
    - provenance trials, progeny testing, Chile 8237
    - shoot cuttings 5539
    - water stress, plant physiology, Portugal 1930
  - *Fagus sylvatica*
    - Germany, isoenzymes 9987
- **Genetic variation** *cont.*
  - *Fagus sylvatica cont.*
    - plant water relations, cavitation, Italy 3607
    - reviews, Germany 6582
  - forest trees
    - forest decline, Europe 6583
    - salt tolerance, plant physiology, reviews 1887
  - fungal diseases
    - *Melampsora medusae*, *Populus deltoides*, resistance 4873
    - *Valsa sordida*, *Populus*, frost resistance 10009
  - gene flow, *Pentaclethra macroloba*, Costa Rica 3139
  - genetic gain, *Pinus densiflora*, progeny testing, Korea Republic 8204
  - genetic markers, *Koelreuteria paniculata*, Korea Republic 8239
  - genotype environment interaction
    - *Picea mariana*, gas exchange, Canada 9851
    - *Salix viminalis*, increment, plant nutrition, soil types 4838
  - *Gliricidia sepium*
    - nitrogen fixation, nodulation, Sri Lanka 3994
    - provenance trials, Malawi 2555
  - heritability
    - clones, *Pinus radiata*, New Zealand 4820
    - *Grewia optiva*, increment, India, correlation analysis 9982
    - *Picea abies*, tree breeding, progeny testing, Finland 9972
    - *Pinus contorta*, seedling growth, Canada 5479
    - *Pinus sylvestris*, tree breeding, progeny testing, Finland 9973
  - inbreeding depression, *Pinus*, conservation 5480
  - induced mutations, bamboos, *Bambusa pallida*, plant morphology 5558
  - insect pests, *Dreyfusia piceae*, *Abies fraseri*, USA 5686
  - isoenzymes
    - *Abies alba*, outcrossing, Italy 5511
    - *Acacia*, sampling, methodology, techniques 1612
    - *Acacia senegal*, provenance, Senegal 9981
    - *Atherosperma moschatum* 8242
    - *Carpinus laxiflora*, Japan 2203
    - *Castanea* 592
      - taxonomy, identification 2217
    - *Chamaecyparis obtusa*, Japan 565
    - *Dryobalanops aromatica*, Brunei Darussalam 7365
    - *Eucalyptus*, early selection, increment 4839
    - *Fagus crenata*, Japan 2202
    - *Fagus grandifolia*, USA 8240
    - *Fagus sylvatica*
      - France 581
      - Italy 8250
    - gene flow
      - *Pinus sylvestris*
        - Belarus 571
        - Latvia 571
        - Russia 571
        - Ukraine 571
    - genetic erosion, conifers 9966
    - inbreeding, *Taxus brevifolia*, Canada 574
    - *Juglans nigra*, seed orchards, USA 5540
    - *Juglans regia* 5546
      - foliage, Italy, morphology 5554
      - fruits, Italy, morphology 5554
    - *Larix sibirica*, chromosomes, taxonomy 4746
    - *Larix sukaczewii*, Russia 5495
    - *Leucaena leucocephala*
      - Central America 590
      - Haiti 590
      - Madagascar 590
    - *Liquidambar*
      - China 586
      - Mexico 586
      - USA 586
- **Genetic variation** *cont.*
  - isoenzymes *cont.*
    - *Magnolia*, USA 579
    - *Nothofagus truncata*, New Zealand 584
    - *Phyllocladus*, frost resistance, New Zealand 562
    - *Picea abies*
      - Latvia 7347
      - seed orchards, pollination, Sweden 9969
    - *Picea glauca*, North America 9977
    - *Pinus*
      - growth rings, Russia 8193
      - USSR 5514
    - *Pinus contorta*, evolution, USA 9047
    - *Pinus massoniana*, China 8213
    - *Pinus sylvestris*, Bulgaria 561
    - *Pinus thunbergii*, Japan, geographical distribution 4816
    - population genetics
      - *Abies alba*, Slovakia 8218
      - *Acacia nilotica*, Kenya 5550
      - *Acer saccharum*, air pollution, Canada 9986
      - *Atherosperma moschatum*, Australia 7380
      - *Chamaecyparis*, Taiwan 4835
      - *Pinus mugo* × *Pinus sylvestris*, Poland 9976
      - *Pinus strobus*, Canada 3983
      - *Pinus sylvestris*, seed orchards, Poland 1426
      - *Quercus*, Germany 9988
    - *Pseudotsuga menziesii*
      - forest plantations
        - provenance
          - France 5488
          - Germany 5488
          - USA 5488
      - Poland 5485
    - *Pterocarpus macrocarpus*, Thailand 9059
    - *Quercus ilex* 8244
    - *Quercus petraea*, Europe 9060
    - *Quercus robur*, Finland 8233
    - *Salix*, Canada 9062
    - *Salix eriocephala* 5553
    - *Tectona grandis* 8246
    - *Terminalia superba*, sampling, methodology, techniques 1612
    - *Toona sinensis*, varieties 8243
    - *Ulmus*, taxonomy, France 5429
  - *Lagerstroemia speciosa*, progeny testing, India 9057
  - *Larix eurolepis*, shoot cuttings, rooting capacity, France 570
  - *Larix occidentalis*, water use efficiency, USA, growth 1274
  - *Larix sibirica*, seed germination 8202
  - *Leucaena*
    - gums
      - exudates
        - chemistry
          - Guatemala 2979
          - India 2979
          - USA 2979
  - *Liquidambar styraciflua*, nitrogen fertilizers, USA 9464
  - *Medicago arborea*, fodder, biomass production, Mediterranean Region 1676
  - *Melaleuca alternifolia*, essential oils, Australia 2220
  - Meliaceae, geographical distribution, genetic markers 5528
  - molecular genetics
    - *Eucalyptus*, vegetative propagation 8248
    - *Eucalyptus globulus* 8245
    - *Gleditsia triacanthos* 9983
    - *Populus tremuloides*, Canada 595
  - mycorrhizas, *Pisolithus tinctorius*, *Pinus elliottii* 5598-5599
  - *Nothofagus menziesii*, dispersal, gene flow, New Zealand 2212
  - *Paullinia cupana*, plant morphology, Brazil 587
  - phenotypes, *Picea abies*, enzymes, phosphoenolpyruvate carboxylase, air pollution 9856

Genetic variation *cont.*
- *Phyllostachys*, taxonomy 5530
- *Picea*
  - hybrids, taxonomy 7361
  - USA 2184
- *Picea abies*
  - bark, Italy, terpenoids 2060
  - foliage, oleoresins, monoterpenes, Sweden 1421
  - forest decline, air pollution, sampling, Italy 2191
  - gene flow 7360
  - mountain forests, Europe 6583
  - plant nutrition, provenance trials, Poland 1131
  - provenance trials, hybrids, increment, Sweden 824
  - reviews, Germany 6582
  - seedling growth, phenology, photoperiodism, temperature 8040
  - tissue culture 1697
- *Picea glauca*, wood properties, Canada 559
- *Picea mariana*
  - gas exchange, carbon pathways, increment, Canada 9041
  - increment, height, Canada 6589
  - seedling growth
    - climatic change, plant nutrition, nitrogen 9666
    - phenology, Canada 3980
- *Picea rubens*, photosynthesis, winter, USA 7196
- *Picea sitchensis*, acid deposition, frost resistance, age of trees 2887
- *Pinus*
  - selection criteria, France, silvicultural characters 9035
  - stand structure, resin tapping, Russia 197
- *Pinus caribaea*, seed weight, seed germination, seedling growth 75
- *Pinus cembra*
  - cones, seeds, Romania 9040
  - hybrids, Romania, growth 2186
- *Pinus cembroides*, seeds, Mexico, fatty acids 424
- *Pinus contorta*, progeny testing, Sweden 1431
- *Pinus elliottii*, roots, morphology 5598
- *Pinus koraiensis*, seeds, seedlings, Korea Republic 8203
- *Pinus leucodermis*, chemotaxonomy, Mediterranean Region 2194
- *Pinus nigra*, flowering 8214
- *Pinus patula*, tree breeding, progeny testing, Mexico 566
- *Pinus pinaster*, height, Portugal 7352
- *Pinus ponderosa*
  - drought resistance, plant physiology, plant morphology, USA 1889
  - gas exchange, photosynthesis, transpiration, North America 8198
- *Pinus radiata*
  - bark, monoterpenoids, New Zealand 4824, 4826
  - increment, stem form, fungal diseases, New Zealand 4818, 4821
  - nitrogen fertilizers, plant physiology, Australia 7752
  - nutrient deficiencies, New Zealand 5293
  - provenance trials, New Zealand 4817
  - seedling growth, stem form, New Zealand 4819
  - stem form, plant nutrition, nitrogen 2949
  - tissue culture 5094
    - micropropagation 5095
  - tree breeding, New Zealand 4825
  - wood anatomy, tracheids, cell walls, New Zealand 3735
  - wood chemistry, oleoresins, New Zealand 4823
  - wood density, spiral grain, New Zealand 4822
- *Pinus strobus*, plant morphology, Canada 8197
- *Pinus sylvestris*
  - chemotaxonomy, Russia 2181
  - habit, Germany 8209

Genetic variation *cont.*
- *Pinus sylvestris cont.*
  - photoperiodism, seedling growth 3972
  - plant morphology 8199
  - pollen, Sweden 6588
  - seed aging, testing 2564
  - shoots, development, plant nutrition 3717
  - terpenoids 5397
- *Pinus taeda*
  - acid deposition, ozone, seedling growth 1963
  - shoot cuttings, auxins, rooting 5068
- population genetics
  - *Acacia*, Zaire 2208
  - *Agathis borneensis*, Brunei Darussalam 7354
  - *Cercis siliquastrum*, seeds, proteins 5549
  - *Cupressus sempervirens*, Greece 2190
  - *Dryobalanops*, Brunei Darussalam 7364
  - isoenzymes
    - *Pinus*, Switzerland 5489
    - *Pinus koraiensis*, Korea Republic 2192
    - *Quercus*, Europe 5557
  - *Pinus edulis*, USA 6590
  - *Pinus sylvestris*
    - Europe 572
    - Russia 572
    - Turkey 572
  - *Taxus baccata*, Poland 8207
  - *Thuja plicata*, seedling growth, frost resistance, USA 1429
- *Populus*
  - increment, plant morphology 5551
  - Italy, wood properties 6604
  - plant morphology, tree breeding, China 593
- *Populus deltoides*, tissue culture, genetic markers 8232
- *Populus tremula*
  - geographical distribution, autecology, UK 7142
  - hybrids, species trials, Sweden 9416
- *Populus tremuloides*, hybrids, species trials, Sweden 9416
- *Populus trichocarpa*, seedling growth, survival, USA, stress factors 3996
- *Prosopis cineraria*, foliage, chemistry, India 9050
- *Prunus avium*, frost resistance, buds 282
- *Pseudotsuga menziesii*
  - biomass, USA, increment 2182
  - cambium, phenology, USA 4828
  - gas exchange, photosynthesis, transpiration, North America 8198
  - lammas growth, drought, adaptation 4654
  - plant morphology, USA, increment 2183
  - seed orchards, mating systems, France 9038
  - tree breeding, seedling growth, USA 9968
- *Pterocarpus indicus*, progeny testing, plus trees, Indonesia 6595
- *Quercus*, wood properties, France 4595
- *Quercus ithaburensis*, foliage, phenology, Israel 3709
- *Quercus robur*, foliage, development, Croatia 4616
- *Quercus rubra*
  - insect pests, *Lymantria dispar*, resistance 8331
  - plant water relations, herbivores, resistance, USA 8810
  - planting stock, USA 5112
- *Robinia pseudoacacia*
  - coppicing, suckering, USA 2211
  - photosynthesis, light, temperature, carbon dioxide 1267
- *Salix cordata*, *Altica bimarginata*, resistance 5747
- *Salix sericea*, insect pests, USA, resistance 7429
- *Shorea*, Peninsular Malaysia 6603
- *Terminalia*, foliage 5525
- *Terminalia arjuna*, selection criteria, India 580

Genetic variation *cont.*
- tree breeding, seed orchards, simulation 555
- *Virgilia oroboides*, South Africa 7378
- *Ziziphus mistol*, Argentina, flavonoids 420

Genetics (*see also* Chromosomes; Hybrids; Pollination; Tree breeding)
- *Casuarina*, books 2448
- chloroplast genetics
  - clines, *Abies mariesii*, Japan 5497
  - *Cryptomeria japonica*, evolution 9037
  - Cupressaceae, taxonomy 500
  - genetic variation, *Pinus*, USA 563
  - *Larix*, taxonomy 6585
  - *Melaleuca* 5564
  - *Pinus*
    - evolution 9037
    - hybrids, taxonomy 9048
  - *Pinus contorta* 5516
  - *Pinus sylvestris* 8219-8220
    - enzymes 5416
  - *Pinus thunbergii* 2193
  - population genetics, *Eucalyptus nitens*, Australia 2213
  - *Populus trichocarpa* × *Populus deltoides*, identification 5535
  - Taxodiaceae, taxonomy 500
- chromosome aberrations
  - *Picea abies*
    - air pollution, ozone, carbon dioxide enrichment 4836
    - forest decline, plant physiology, Austria 4727
- climatic change, Austria, conferences 9328
- cytogenetics
  - *Acacia*, Réunion 4840
  - *Quercus robur* 5950
- cytoplasmic inheritance, *Agathis australis*, fertilization 9884
- *Eucalyptus urophylla*, progeny testing, plant morphology, Indonesia 2204
- forest trees
  - climatic change, adaptation 2172
  - forest ecology, climatic change, plant physiology, conferences 1606
  - hybrids, polyploidy, simulation 7338
  - tree breeding, Japan 1420
- genotype environment interaction
  - broadleaves, water stress, adaptation, USA 2206
  - forest trees, provenance trials, climatic change, simulation 1659
  - *Psychotria horizontalis*
    - precipitation
      - plant morphology, Panama 1880
      - plant physiology, Panama 1880
- genotypes, forest trees, silviculture, wood properties, reviews 8008
- heritability
  - *Abies holophylla*, progeny testing, Korea Republic 8205
  - *Eucalyptus gunnii*, cold resistance, France, provenance, growth 9053
  - *Pinus palustris*, increment, volume 8217
  - *Pinus patula*, tree breeding, progeny testing, Zimbabwe 557
  - *Pseudotsuga menziesii*, stem form, France 8215
- inbreeding
  - *Larix decidua*, Poland 7209
  - *Pinus ponderosa*, USA 569
- inheritance
  - *Acacia mangium*, progeny testing, Indonesia 2205
  - *Castanea dentata* × *Castanea mollissima*, plant morphology 5545
  - *Juglans*, hybrids, genetic markers 5529
  - *Pinus sylvestris*, random amplified polymorphic DNA 8221
  - *Pseudotsuga menziesii*, genetic markers 5481

Genetics *cont.*
- isoenzymes
  - gene mapping
    - conifers
      - Belarus 9044
      - Latvia 9044
      - Russia 9044
      - Ukraine 9044
  - *Libocedrus chilensis* 2197
  - *Picea abies*
    - natural layering, subalpine forests, Germany 558
    - nutrient deficiencies, Germany 1424
    - Poland 5483
  - *Pinus,* methodology 5501
  - *Pinus sylvestris,* Ukraine, radiation 5484
  - polyembryony, *Pinus sibirica,* Russia 8223
  - *Prunus avium,* anther culture 5090
- *Juglans nigra,* provenance trials, USA 5059
- karyotypes, *Acacia* 588
- messenger RNA, induction, forest trees, seedlings, ozone 8185
- mitochondrial genetics
  - *Larix eurolepis,* somatic embryogenesis 573
  - nucleic acids, purification, *Larix eurolepis,* somatic embryogenesis 9032
- molecular genetics 5475
  - *Abies alba,* taxonomy 8227
  - *Abies balsamea,* cambium 3127
  - *Abies nebrodensis,* taxonomy 8227
  - *Acer pseudoplatanus,* enzymes, laccase 8249
  - broadleaves, techniques 3998
  - *Cercocarpus traskiae,* endangered species, USA 5518
  - DNA, measurement, flow cytometry, *Eucalyptus* 1440
  - *Eucalyptus grandis,* clones, identification, South Africa 576
  - *Eucalyptus saligna,* DNA hybridization, techniques 5533
  - *Fraxinus americana* 5562
  - gene mapping, *Populus* 7367
  - identification, *Leucaena leucocephala* × *Leucaena esculenta,* hybrids, Mexico 2224
  - *Larix laricina,* biochemistry, ribulose-bisphosphate carboxylase, light 3981
  - linkage, *Eucalyptus* 5555
  - mapping, *Betula,* Iceland 9056
  - nucleotide sequences, *Picea abies* 9046
  - *Olea europaea,* cytology 585
  - *Paulownia taiwaniana,* taxonomy 5531
  - *Picea abies* 5507, 8195
    - flowering 5504
  - *Pinus lambertiana,* disease resistance, *Cronartium ribicola* 9114
  - *Pinus palustris* 5494
  - *Pinus ponderosa,* seeds, chemistry, phylogeny 440
  - *Pinus sylvestris*
    - air pollution, ozone 4566
    - enzymes 5505
  - *Pinus taeda* 5493
    - enzymes, cinnamyl-alcohol dehydrogenase 8226
  - *Pinus thunbergii*
    - seed germination 3130
    - seeds 3130
  - *Populus interamericana* 5532
    - enzymes 7377
      - methyltransferase 2087
    - foliage, injuries 2214
  - *Populus kitakamiensis* 5536
  - *Populus tremuloides,* enzymes 5544
  - *Quercus,* France 2216
  - random amplified polymorphic DNA
    - conifers 9045
    - *Picea abies* 2199
  - restriction fragment length polymorphism, *Sequoia sempervirens* 9036

Genetics *cont.*
- molecular genetics *cont.*
  - ribosomal DNA
    - *Picea* 5498
    - *Picea abies* 5498
  - RNA, *Morus rubra* 3988
  - *Robinia pseudoacacia,* bark 5563
  - *Salix,* DNA fingerprinting 5523
  - *Ulmus*
    - phylogeny, taxonomy 5541
    - resistance, *Stegophora ulmea* 8306
- mutations, mangroves, *Rhizophora mangle,* Puerto Rico, pigments 5520
- natural selection
  - *Fagus sylvatica* 5552
    - Germany, mathematics 2219
- *Picea rubens,* North America 6586
- ploidy
  - *Acacia,* Réunion 4840
  - *Larix decidua,* tissue culture 7359
  - Myrtaceae, reproductive behaviour, natural selection 578
  - *Ulmus americana,* hybrids, disease resistance, USA 1456
- population genetics
  - bamboos, *Yushania niitakayamensis,* Taiwan, random amplified polymorphic DNA 5547
  - *Banksia brownii,* reproductive behaviour, endangered species, Australia 3825
  - *Cordia alliodora,* reproductive behaviour, mating systems, Costa Rica 6598
  - *Eucalyptus albens,* woodlands, fragmentation, Australia 5559
  - forest trees, reviews 2175
  - gene flow, *Cordia alliodora,* Costa Rica 6599
  - genetic variation, isoenzymes, *Cordia alliodora,* Central America 6597
  - *Gliricidia sepium,* random amplified polymorphic DNA 5548
  - isoenzymes
    - *Cecropia obtusifolia,* Mexico 5538
    - *Eucalyptus urophylla,* Indonesia 591
    - *Pinus nigra,* Europe 2187
    - *Pinus radiata,* statistical analysis 5482
    - *Pinus strobus,* Canada 5491
    - *Pinus sylvestris,* Spain 2185
  - *Picea glauca,* seed orchards, pollination, Canada 564
  - *Pinus flexilis,* stem form, USA 3708
  - *Pinus nigra*
    - Spain 5487
    - Turkey 8212
  - *Pinus sibirica,* synecology, Russia 4755
  - *Pinus sylvestris*
    - cones, variation, Poland 7349
    - foliage, variation, Poland 7350
    - habit, Poland 9975
    - Russia 2180, 5486
  - *Quercus,* France 594
  - *Quercus robur,* Moldova, foliage, morphology 9054
  - *Sorbus,* hybrids, plant morphology, Switzerland 6596
- quantitative genetics, *Larix decidua, Larix leptolepis,* hybrids, Germany 3129
- *Quercus*
  - breeding programmes
    - Europe, conferences 3306
    - North America, conferences 3306
- recombination, *Pinus taeda,* sex 8208

Genipa caruto, wood anatomy, wood properties 6428

Genista scorpius, sclerophyllous scrub, habit, Spain 3705

Geoffroea decorticans, phenology, climate, Argentina 1210

Geographical distribution
- *Abies alba,* increment, Poland 1009
- *Acer saccharum,* grain and figure, North America 8861

Geographical distribution *cont.*
- *Araucaria angustifolia,* pollen analysis, climate, Brazil 2129
- *Betula,* synecology, botanical composition, Russia 1353
- *Betula pubescens,* nature conservation, Greece 1575
- bison, *Populus tremuloides,* grazing, Canada 7268
- boreal forests, climate, Canada 4771
- *Casuarina collina,* site factors, plant nutrition, New Caledonia 8887
- *Cinnamomum sulphuratum,* endangered species, India 8959
- coastal areas
  - mangroves
    - *Duabanga,* India 2120
    - *Sonneratia,* India 2120
- conifers, stand characteristics, Japan 4766
- *Cornus peruviana,* seed dispersal, birds, Colombia 1327
- deciduous forests, synecology, Saudi Arabia 1360
- *Dehaasia firma,* India 505
- forest trees
  - altitude, India 1356
  - climate, synecology, New Zealand 7266
  - maps, Austria 7001
- forests, understorey, palaeoecology, Japan 1349
- grasslands, *Nothofagus,* palaeoecology, New Zealand 4765
- *Gymnostoma,* site factors, plant nutrition, New Caledonia 8887
- *Juglans regia,* silvicultural characters, plant morphology, Italy 6138
- *Larix sibirica,* Russia 6536
- mangroves, Mexico 7264
- maps, Greece, trees, shrubs, Greece 753
- Meliaceae, genetic variation, genetic markers 5528
- migration, forest trees, global warming, USA, simulation 9665
- *Nothofagus,* genetic variation, adaptation, hybrids, Chile 6386
- *Picea rubens,* altitude, USA 2138
- *Pinus,* temperature, climatic zones 7867
- *Pinus contorta,* provenance trials, adaptation, Canada 2548
- *Pinus discolor,* Mexico 6534
- *Pinus resinosa,* climate, simulation, North America 2135
- *Populus tremula,* autecology, genetic variation, UK 7142
- *Premna wightiana,* flora, Sri Lanka 6522
- *Prunus,* taxonomy 1351
- *Pyrus,* taxonomy, nomenclature, bibliographies 7221
- *Quercus coccifera,* Italy 9918
- *Quercus frainetto,* silvicultural characters, stand characteristics, Italy 6391
- *Quercus ilex,* plant water relations, cavitation, climatic factors, Sicily 3613
- *Rosa,* taxonomy, Greece 1352
- *Salix,* Europe, analysis 2137
- site factors, *Colophospermum mopane,* vegetation types, Africa 6535
- Ulmaceae 1350
- vegetation types
  - classification, Africa, theory 6542
  - climate, Russia, simulation 3938
- woody plants
  - Asia 7262
  - climate, simulation, USA 3070
  - Europe 7262

Geographical information systems
- *Abies sachalinensis,* thinning, slopes, Japan, planning 6934
- *Alnus glutinosa,* groundwater, soil chemistry, Germany 8163
- Canada 247
- forest health, UK 8938
- forest inventories
  - forest pests, mapping 9632
  - remote sensing, Belgium, stand characteristics 259
- forest management
  - decision making, expert systems 1622
  - Japan, work planning 6195

Geographical information systems *cont.*
- forest management *cont.*
  - planning, remote sensing, imagery 1016
  - wildlife, simulation 236
- forest ownership, forest inventories, USA 6234
- forests, mapping, Switzerland 2756
- land classification, forest ownership, USA 6235
- land use, planning, New Zealand 8401
- land use planning, USA, social behaviour 8399
- landscape, history, Switzerland, analysis 2431
- mapping, stand characteristics, composition, site factors, Norway 5021
- maps
  - basal area, botanical composition, Canada 4451
  - forestry, mathematical models 4451
- *Picea sitchensis,* site class assessment, UK 5180
- *Pinus radiata,* site class assessment, statistical analysis, New Zealand 4402
- *Pinus* (Southern), hydrology, biomass production, USA 2506
- protection forests, France, avalanches, landslides 3227
- remote sensing, forest management, USA, books 6774
- vegetation types, surveys, Australia, sampling 7014

Geology
- conifers, forest decline, soil parent materials, France 8943
- forests, synecology, India 1354
- remote sensing, vegetation types, Canada 260
- scrub, synecology, India 1354
- vegetation, soil types, geomorphology, erosion, Spain 7859

Geomorphology
- bottomland forests, hydrology, plant succession, Hungary 8994
- vegetation, soil types, geology, erosion, Spain 7859

Geomyidae, rodents, USA, population dynamics, sampling 7671

Germany
- *Abies,* dendrochronology, increment, basal area, statistical analysis 793
- *Abies alba,* planting stock, root pruning, root systems 6109
- accidents, statistics, training 823
- acid deposition
  - site types 8846
  - synecology, books 1593
- afforestation
  - history 9501
  - subsidies 9402
- air pollution
  - damage, remote sensing, thematic mapper 6233
  - measurement 7103
  - ozone, health, forestry workers 5045
  - site types 8846
- *Alnus glutinosa*
  - forest litter, decomposition, fungi 8784
  - groundwater, soil chemistry, geographical information systems 8163
  - provenance 9422
  - yield tables 8713
- *Betula,* plant nutrition, pioneer species 2850
- *Betula pendula,* thinning, stems, quality, wood properties 9519
- biographies, history 5969
- birds
  - forest trees, short rotation forestry 7540
  - *Garrulus glandarius, Quercus,* seed dispersal 1307
  - *Nucifraga caryocatactes,* conifers, seed dispersal 1307
  - *Tetrao urogallus,* habitats 6688
- broadleaves
  - forest litter, decomposition 1915
  - mined land, clay soils 1538

Germany *cont.*
- broadleaves *cont.*
  - natural regeneration, silvicultural conversion 9493
  - plant water relations, stomatal resistance, abscisic acid 2083
  - root systems, spatial distribution 4661
  - urban forestry, amenity trees 2432
  - viral diseases 8318
- carbon dioxide enrichment, fertilizers, lime 9766
- *Carpinus betulus,* natural regeneration, silvicultural conversion 4322
- Christmas trees 2669
- climatic change, phenology, frost resistance, simulation 2804
- coniferous forests
  - air pollution, forest ecology 6340
  - ground vegetation, amelioration of forest sites 8166
  - *Pinus sylvestris,* synecology 7282
- conifers
  - afforestation, soil chemistry 9764
  - air pollution, sulfur dioxide, foliage 5315
  - flowering, induction, seed orchards 6511
  - forest decline, foliage, cuticle, permeability 2089
  - nutrient deficiencies 6314
  - shoots
    - defoliation, forest decline 9865
    - emission, hydrogen sulfide 8099
  - silvicultural conversion 6132
- cooperatives, history 4235
- cycling, soil biology, soil chemistry 7049
- deer
  - browsing damage, protection forests, forest economics 7533
  - *Capreolus capreolus,* forest recreation 7537
- endophytes
  - *Phialocephala compacta, Alnus glutinosa* 9068
  - *Phialocephala scopiformis, Picea abies* 9068
- environment, nature reserves, research 5994
- experimental plots, history 5997
- *Fagus sylvatica*
  - air pollution, lead, plant composition, altitude 4567
  - canopy gaps
    - soil biology 7937
      - microorganisms 7936
    - soil water balance, cycling 7950
  - carbon cycle 323
  - fertilizers
    - plant residues, soil chemistry 892
    - water quality 884
  - foliage, flavanols 433
  - forest influences, air, monoterpenes, diurnal variation 1186
  - forest litter
    - decomposition
      - branches, roots 2825
      - soil biology 7910
      - temperature 7907
    - plant succession, fields 2825
  - genetic variation
    - isoenzymes 9987
    - reviews 6582
  - ground vegetation, heavy metals, uptake 8165
  - increment, climate, simulation 1058
  - natural regeneration, silvicultural conversion 4322
  - natural selection, mathematics 2219
  - plant succession, synecology 9953
  - roots, respiration 7185
  - sap, sulfur, distribution, seasonal variation 1134
  - seed production, seed quality, stand age 2567
  - soil biology, microorganisms, carbon cycle, nitrogen cycle 7933
  - stem form, eccentricities, genetic variation 5519
  - synecology, plant communities, statistical analysis 3327

Germany *cont.*
- *Fagus sylvatica cont.*
  - transpiration, microclimate, leaf conductance, equations 9719
  - understorey, silviculture 9545
  - wood chemistry
    - growth rings, nickel, seasonal variation 2976
    - heavy metals, air pollution, seasonal variation 6343
- fens, groundwater, soil chemistry, botanical composition 8163
- fertilizers
  - fly ash 9467
  - sewage sludge, legislation 8593
- flowering, phenology 9780
- forest administration 7021
  - history 4235, 9385
  - nature conservation 10130
- forest decline, surveys 6505
- forest ecology, research 9405
- forest economics
  - forest ownership 9655
  - multiple use
    - amenity and recreation areas 1049
    - marketing 1048
  - risk assessment 4197
- forest fires, gunfire and bomb damage, history 9381
- forest influences, ground vegetation, nature conservation, weeds, fields 4964
- forest inventories 4439
  - forest decline 9628
  - forest management 9627
  - growing stock 4435
  - sample plot technique 1023
  - sampling, statistical analysis 1020
- forest management 4424, 7827
  - multiple use 9616
  - planning
    - books 4164
    - nature conservation 9615
  - silviculture, planning 9617
  - working plans, national parks 9618
- forest ownership, conferences 9329
- forest plantations, stand development, yield forecasting, growth models 4222
- forest policy 5975
  - decision making 9380
- forest recreation, valuation 8744
- forest roads, soil pollution 1982
- forest trees
  - afforestation, carbon cycle 8866
  - air pollution, arsenic 8836
  - artificial regeneration, protection forests 7552
  - choice of species, protection forests, avalanches 6869
  - fertilizers, lime, ground vegetation 8591
  - group fellings, canopy gaps, plant succession 8607
  - increment 6982
    - height, growth models 6185
  - mixtures, stand establishment, cover crops, fertilizers 6923
  - natural regeneration, statistical analysis, spatial distribution 7774
  - plant competition, nature reserves 9956
  - roots, dendrochronology 6760
  - silvicultural systems, selection system, stand characteristics 6132
  - silviculture, conferences 5940
  - site requirements, soil chemistry, base saturation 9695
  - stand density 2687
  - thinning 9526
    - pruning 9525
  - tissue culture, research 7735
- forestry 4233
  - history 5976-5977, 6844
    - environment 4235
    - methodology 9382
  - metallurgy, history 6722
  - pesticides 5673
  - public relations, conferences 4176
- forests
  - pollution, heavy metals 5339

Germany *cont.*
- forests *cont.*
  - soil chemistry, heavy metals 288
  - soil pollution, pesticides, residues 305
- Formicidae, forest ecology 8323
- *Fraxinus excelsior*
  - *Fagus sylvatica,* natural regeneration, plant competition, plant water relations 9781
  - forest litter, decomposition, branches, roots 2825
  - plant competition, increment, statistical analysis, mixtures 791
- fuel plantations
  - forest economics 4252
  - short rotation forestry 4251, 6009
- fungal diseases
  - *Acer pseudoplatanus,* foliage 7405
  - *Armillaria, Picea abies* 1451
  - *Cryphonectria parasitica, Castanea sativa* 5648
  - *Heterobasidion annosum, Picea abies* 4859
  - *Phytophthora, Quercus robur,* forest decline 8292
  - *Pithya cupressina, Juniperus,* damage 9113
  - *Platanus acerifolia,* pollarding 7607
  - *Seiridium cardinale,* Cupressaceae, amenity trees 9111
- ground vegetation
  - indicator species 9948
  - soil water, soil pH, indicator plants 8167
- history
  - degraded forests 808
  - forest resources 4234
  - maps, forest management 9614
  - tree breeding 4230
- increment, volume, forest inventories 1000
- insect pests
  - *Agrilus biguttatus, Quercus* 10048
  - *Bupalus piniarius*
    - *Pinus sylvestris*
      - air pollution
        - pest resistance 8335
        - plant composition 8335
      - damage 4883
  - *Cameraria ohridella, Aesculus hippocastanum* 5726
  - *Choristoneura murinana,* biological control 5803
  - Coleoptera, forest trees 2355
  - *Cryptococcus fagisuga, Fagus sylvatica,* bark, proteins 1480
  - *Diprion pini, Pinus,* population dynamics 5767
  - *Ips cembrae, Larix decidua,* resistance 2344
  - *Ips typographus, Picea abies,* control 3191
  - Lepidoptera, *Alnus* 10042
  - *Lymantria dispar*
    - biological control 5803
    - forest trees, control 5795
    - *Quercus* 10057
  - *Lymantria monacha*
    - biological control 5803
    - biology 8333
    - population dynamics 6651
  - *Malacosoma neustria,* biological control 5803
  - *Neodiprion sertifer,* biological control 5803
  - *Phyllaphis fagi, Fagus sylvatica,* plant nutrition, defence mechanisms 5685
  - *Pityogenes chalcographus, Picea abies,* biological control 9171
  - *Populus* 7430
  - *Pristiphora abietina, Picea abies* 10057
  - *Schueziella quercicola, Quercus robur,* galls 7494
  - Scolytidae
    - *Picea abies* 10057
    - trapping, nontarget effects 2356
- insects, Coleoptera, *Populus,* linear plantations, ecology 2298
- land clearance, planning, history 4235

Germany *cont.*
- land use planning, multiple land use, biodiversity, conservation, techniques 8450
- landscape 4231
  - history, maps 8525
- *Larix,* tree breeding 4230
- *Larix decidua*
  - broadleaves, natural regeneration, soil chemistry 8660
  - *Larix leptolepis,* hybrids, genetics 3129
  - spacing, stand development 8660
- *Larix leptolepis,* mixtures, increment 9593
- mammals, *Castor fiber,* broadleaves 6674
- medicinal plants, books 2444-2445
- mixed forests, silviculture 919
- mountain forests
  - air pollution, damage, artificial regeneration 9500
  - artificial regeneration, mixtures 948
- mycoplasma-like organisms, *Quercus robur* 2291
- mycorrhizas, *Picea abies* 3158
- nature conservation
  - forest administration 10131
  - forest management, cost analysis 1582
- nature reserves
  - research, history 9303
  - vegetation types 9304
    - deciduous forests 6749
- Oligochaeta, *Picea abies,* fertilizers, lime, acid deposition 1105
- *Picea abies*
  - air pollution 2850
    - acid deposition, measurement 6350
    - deposition
      - cycling 6332
      - simulation 331
    - nitrates 3649
    - oxidants, peroxidases 3662
    - soil chemistry, nutrient deficiencies 9755
    - sulfur dioxide 4565, 9864
      - uptake 7983
    - throughfall, soil chemistry, nitrogen 5241
    - water stress, foliage 449
  - Coleoptera, dead wood 1472
  - cycling, sulfur 7965
  - defoliation, nutrient deficiencies, soil chemistry, phosphorus 1126
  - drought, soil, minerals, wood anatomy 2897
  - foliage
    - air pollution, volatile compounds, insecticide residues 6342
    - chemistry
      - alkali metals 5394
      - rare earth elements 2982
    - plant growth regulators, air pollution, damage 2995
    - shedding, forest health, methodology 3319
    - wettability, measurement 2953
  - forest damage, diagnosis, biochemistry, reviews 6503
  - forest decline
    - air pollution
      - nitrogen cycle 3823
      - photosynthesis 2090
    - foliage
      - antioxidants 4723
      - phenolic compounds 7208
    - photosynthesis, photoinhibition, metabolism 1291
    - plant nutrition, amino acids 3805
    - snow damage 9864
    - statistical analysis 4198
  - forest influences, air, monoterpenes, diurnal variation 1186
  - genetic variation, reviews 6582
  - genetics
    - isoenzymes
      - natural layering, subalpine forests 558
      - nutrient deficiencies 1424

Germany *cont.*
- *Picea abies cont.*
  - ground vegetation, fertilizers, forest decline 9463
  - increment, climate 7818
  - lime, soil biology 7760
  - magnesium fertilizers, cycling 7761
  - nutrient deficiencies
    - magnesium, soil chemistry 7057
    - magnesium fertilizers
      - foliage 132
      - soil chemistry 132
    - nitrogen 1126
  - photosynthesis, photoinhibition, light, temperature 1292
  - plant nutrition
    - foliage, age 7958
    - forest decline, magnesium 1127
  - plant succession, nature reserves 9954
  - plantations, synecology 9004
  - provenance trials, statistical analysis 8559
  - silvicultural systems, selection forests 918
  - soil amendments, dolomite, soil chemistry, soil solution 3412
  - soil chemistry, acidification, seasonal variation, simulation 7978
  - soil pH, research 9697
  - soil water potential, diameter 9687
  - valuation 9656
  - yield tables, site class assessment, air pollution 9602
- *Picea pungens,* forest nurseries, nutrient deficiencies, potassium 1147
- *Pinus sylvestris*
  - air pollution
    - ammonia 7104
      - biochemistry 8847
    - fly ash 4188
    - foliage, antioxidants 6337, 6355
    - sulfur dioxide, biochemistry, enzymes 2883
  - amelioration of forest sites, fertilizers 8592
  - assimilation, seasonal variation 3006
  - carbon cycle 8866
  - dendroclimatology, water stress 10159
  - foliage
    - air pollution
      - heavy metals 4555
      - organochlorine compounds 4556
    - enzymes, glutamate dehydrogenase, air pollution 6479
  - forest litter, fungi, ecology 3143
  - genetic variation, habit 8209
  - groundwater, increment 4524
  - increment, variation, thinning, selection criteria 999
  - insects, honeydew, production 8681
  - provenance trials 7719, 9424
    - IUFRO 831
  - radionuclides, fallout, soil pollution, movement in soil 8830
  - sap flow, resin tapping 7067
  - silvicultural conversion 9501
    - broadleaves 4322
    - thinning 9498
  - silvicultural systems, history 915
  - tree breeding 4230
  - water stress 2833
  - wood chemistry, trace elements, extractants, air pollution 9843
- *Pinus uncinata,* bogs, nature reserves 9930
- plant succession
  - climatic change, simulation 8171
  - cycling, sandy soils 7961
- planting stock
  - marketing 9478
  - requirements, forest management 9481
- *Populus tremula,* plant nutrition, pioneer species 2850
- precipitation, statistical analysis 792
- private forestry, history 4235
- *Prunus avium,* silviculture, increment 6137

- **Germany** *cont.*
  - *Prunus serotina,* control, woody weeds, herbicides 9513
  - *Pseudotsuga menziesii*
    - crown, development 411
    - forest plantations, provenance, genetic variation, isoenzymes 5488
    - pruning, wood properties 8859
    - silviculture 4362
    - thinning 944
      - increment 9523
  - *Quercus*
    - agroforestry, history, economics 782
    - group planting 9499
    - isoenzymes, population genetics 9988
    - planting stock, planting 9497
    - seeds
      - periodicity
        - dendrochronology 782
        - history 782
    - understorey, natural regeneration, *Pinus sylvestris* 925
  - *Quercus petraea*
    - direct sowing, underplanting 9498
    - fertilizers, water quality 884
    - forest economics, prices, growth effects 4589
    - increment, variation 997
    - wood chemistry, heavy metals, air pollution, methodology 7653
  - *Quercus pubescens,* vegetation types 9935
  - *Quercus robur*
    - air pollution, damage, waxes 5333
    - cleaning 6121
    - Coleoptera, dead wood 1472
    - forest nurseries, containers 9475
    - growth rings, cadmium 6458
    - light, plant morphology, growth 7028
    - natural regeneration, silvicultural conversion 4322
  - *Quercus rubra,* growth models 9595
  - refuse tips, legislation, European Union 9401
  - relief, landscape ecology 7042
  - remote sensing, radar, biomass 3517
  - riparian forests, biodiversity, conservation 4128
  - rodents, trapping 10079
  - Salicaceae, ground vegetation, short rotation forestry 6554
  - *Salix caprea,* plant nutrition, pioneer species 2850
  - *Sequoiadendron giganteum,* provenance trials 1674
  - shelterbelts, agricultural land, planning 1535
  - silvicultural systems, history 5972
  - silviculture, forest ecology 4323
  - site types
    - books 4162
    - maps, silviculture 9639
    - vegetation types 4769
  - skidding, planning 1176
  - snow, evaporation, forest influences 4933
  - soil chemistry, soil surveys 9696, 9698
  - soil parent materials, site types, mapping 9708
  - soil pH, buffering capacity, surveys 2813
  - soil pollution, heavy metals, compensation, legislation 7922
  - soil types, mountain forests 9707
  - stand age, classification, remote sensing, radar, relief 3515
  - stand structure, mixtures, simulation 9581
  - street trees
    - air pollution, sulfur dioxide, salt injury 3644
    - dangerous trees, safety devices 10148
  - *Taxus baccata*
    - natural regeneration, nature conservation 2631
    - nature conservation 9778
    - reviews 9778
  - *Thuja occidentalis,* cambium, sucrose, seasonal variation 431
  - *Tilia cordata,* plant competition, increment, statistical analysis, mixtures 791
  - training
    - nature conservation 821

- **Germany** *cont.*
  - training *cont.*
    - safety, private forestry 6003
  - transplanting, mechanization, damage 4979
  - valuation
    - methodology 4458
    - rights of way 9658
    - taxes, legislation 9657
  - vegetation types
    - flora 9003
    - forests 9939
    - soil organic matter, forest influences 289
  - viral diseases, *Fagus sylvatica,* transmission 2290
  - voles
    - *Clethrionomys glareolus*
      - *Populus,* trapping 3212
      - *Salix,* trapping 3212
  - volume determination, remote sensing, photogrammetry, statistical analysis 1034
  - wind damage, history 9383
- ***Gevuina avellana,*** silviculture, Chile 2663
- **Ghana**
  - *Albizia zygia,* degraded forests, reclamation, natural regeneration 8390
  - *Chlorophora,* plant morphology, reproductive behaviour 5420
  - deforestation, land use, fuelwood 3362
  - forest fires, logging, natural regeneration 8881
  - forest management, sustainability 2723
  - forestry, periodicals 4993
  - *Gmelina arborea*
    - forest plantations, increment, biomass production 5174
    - site preparation, forest plantations, increment 5131
  - insect pests, *Phytolyma lata, Milicia excelsa,* resistance, phenotypic variation 10036
  - libraries, information technology 5995
  - *Milicia excelsa,* tissue culture 6059
  - remote sensing, tropical forests, canopy 9642
  - silviculture, handbooks 59
  - *Strombosia glaucescens,* wood anatomy 6402
  - tropical forests, understorey, forest inventories, surveys, techniques 4441
- ***Gibberella acuminata,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Gibberella avenacea,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Gibberella baccata,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Gibberella fujikuroi,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Gibberella fujikuroi*** **var.** ***subglutinans***
  - fungal diseases
    - *Pinus,* Japan, geographical distribution, pathogenicity 3166
    - *Pinus taeda,* air pollution, ozone, disease resistance 8831
- ***Gibberella pulicaris,*** fungal diseases, *Pseudotsuga menziesii,* seedborne fungi, stratification, pathogenicity 4854
- ***Gibberifera simplana*** **subsp.** ***glaciata,*** insect pests, *Populus ciliata,* India, control 3192
- ***Gigantochloa atroviolacea,*** bamboos, cleaning, yields, Indonesia 1800
- ***Gigantochloa atter,*** bamboos, cleaning, yields, Indonesia 1800
- ***Gigantochloa nigro-ciliata,*** bamboos, cleaning, yields, Indonesia 1800
- ***Gigantochloa pseudoarundinacea,*** bamboos, cleaning, yields, Indonesia 1800
- ***Gigantochloa robusta,*** bamboos, cleaning, yields, Indonesia 1800
- ***Gigantochloa scortechinii***
  - bamboos
    - stand characteristics, biomass production, Peninsular Malaysia 6962

- ***Gigantochloa scortechinii*** *cont.*
  - bamboos *cont.*
    - wood anatomy, fibres, wood chemistry, Malaysia 204
- ***Gigaspora***
  - mycorrhizas
    - *Acacia nilotica,* seedling growth, root nodules, nitrogen-phosphorus fertilizers 7385
    - Fabaceae, India, surveys 3152
    - rhizosphere, India 3157
- ***Gigaspora margarita***
  - mycorrhizas
    - *Casuarina equisetifolia,* seedling growth 4851
    - *Leucaena leucocephala*
      - plant nutrition, nutrient uptake 6614
      - seedling growth 1442
        - plant physiology, plant nutrition 596
- ***Gigaspora rosea,*** mycorrhizas, *Prunus avium,* micropropagation 5593
- ***Gilpinia frutetorum***
  - insect pests
    - biology 1493
    - *Pinus sylvestris,* Poland, chemical control 7499
- ***Gilpinia hercyniae,*** insect pests, *Picea abies,* Sweden, water stress, pest resistance 10032
- ***Gilpinia pallida***
  - insect pests
    - *Pinus sylvestris*
      - Finland, foliage, monoterpenes 2367
      - resistance, provenance trials, Finland 10049
- ***Ginkgo,*** embryology, evolution 2940
- ***Ginkgo biloba***
  - agroforestry, France 5882
  - endangered species, medicinal plants 209
  - explants, embryogenesis, techniques 1696
  - foliage, senescence 4649
  - fruits
    - coumarins 1235
    - plant composition 8674
  - gene expression, photosynthesis 5513
  - insect pests, *Metabolus flavescens,* China 7483
  - lignin, biosynthesis 3760
  - nitrogen fertilizers, plant nutrition, USA 1709
  - photosynthesis, plant water relations, diurnal variation 3783
  - plant composition, diterpenoids, analytical methods 9330
  - seed set, China 7215
  - seeds
    - plant composition 8674
    - proteins 439
  - wind damage, salt spray, damage, testing 8850
- **Girdling**
  - *Alnus rubra,* weed control, biological control, Canada, *Chondrostereum purpureum* 3451
  - broadleaves, roots, wire 1981
  - *Broussonetia papyrifera,* enzymes, cytology 6401
  - *Picea sitchensis,* cones, distribution, plant growth regulators, gibberellins 3042
  - *Pinus sylvestris,* wood properties, resinous wood, Sweden 3682
  - *Populus* 'Robusta'
    - bark, proteins 6500
    - wood chemistry, seasonal variation 3780
- **Girth** (*see* Diameter)
- **Glands,** *Caesalpinia,* foliage, taxonomy 2967
- **Glaze** (*see* Ice damage)
- ***Gleditsia,*** root nodules, surveys 2235
- ***Gleditsia triacanthos***
  - foliage, morphology 7154
  - genetic variation, molecular genetics 9983
  - plant succession, old fields, USA 4794
  - root systems, NPK fertilizers, development, density 3407

- ***Gleditsia triacanthos*** *cont.*
  - street trees
    - planting, water uptake 4510
    - pruning, USA, wood residues 4983
  - taxonomy, plant morphology, habit, Poland 2115
  - weed control, USA, herbicides 8644
  - woody weeds, Australia, spread, control 168
- ***Glena***
  - insect pests
    - *Eucalyptus,* Brazil 3181
    - *Eucalyptus urophylla,* Brazil, control 5802
- ***Glena bisulca,*** insect pests, *Pinus,* forest plantations, Venezuela 6645
- ***Gliricidia sepium***
  - agroforestry
    - choice of species, development projects, Cameroon 6734
    - fodder, production, Nigeria 8421
    - green manures, decomposition, nutrients, Togo 8422
    - microclimate, Côte d'Ivoire, crops, plant diseases 8431
    - nitrogen fixation, Philippines 4115
    - roots, dynamics, plant competition, Côte d'Ivoire 8425
  - browse plants, insect pests, Nigeria 8325
  - cutting, species trials, biomass production, increment, Western Samoa 1668
  - cutting frequency, fodder, Cuba 6949
  - cutting programmes, fodder, production, Nigeria 2672
  - direct sowing
    - agroforestry, Jamaica 2419
    - establishment, contour cultivation, erosion control, Nicaragua 4945
  - establishment, agroforestry systems, Nigeria 6730
  - fodder, biomass production, contour cultivation, Sri Lanka 1799
  - foliage, polyphenols, analytical methods 6817
  - green manures, decomposition, agroforestry, Philippines 2418
  - increment, acid soils, lime, agroforestry, Indonesia 4113
  - nitrogen fixation, measurement 1289
  - phosphorus fertilizers, plant nutrition, nitrogen, Nigeria 9724
  - plant parasitic nematodes, *Meloidogyne,* shade trees, crops, Cuba 1496
  - population genetics, random amplified polymorphic DNA 5548
  - provenance, nitrogen fixation, nodulation, Sri Lanka 3994
  - provenance trials
    - agroforestry, Indonesia, fodder 8567
    - Bhutan 1671
    - genetic variation, Malawi 2555
  - pruning, plant nutrition, Nigeria 5153
  - pruning trash
    - chemistry
      - decomposition
        - agroforestry
          - Indonesia 1939
          - laboratory tests 1939
    - decomposition, soil fauna, Nigeria 5262
  - seedling growth
    - symbiosis
      - *Bradyrhizobium japonicum,* nitrogen fixation 3151
      - *Rhizobium,* nitrogen fixation 3151
  - seedlings, nitrogen fixation, measurement 8265
  - silvicultural systems, USA, growth 6090
  - spacing, weed control, community forestry, Malawi 1786
  - species trials
    - agroforestry, acid soils, Cameroon 2542
    - firebreaks, Indonesia 2000
    - fodder, production, Indonesia 3371
    - India 1673
    - Puerto Rico 1666
    - reclamation, mined land, Cuba 1540
  - support trees, crops 9269
- ***Gliricidia sepium*** *cont.*
  - ultisols, fertilizers, seed size, pot experimentation 7758
- **Global warming**
  - air pollution, Portugal, forecasting 3540
  - boreal forests, forest fires, carbon cycle 7275
  - carbon dioxide enrichment, nitrogen cycle, ecosystems, change 4467
  - forest trees
    - climatic change, stand structure, botanical composition 7029
    - forest fires, treelines, Canada 3700
    - geographical distribution, migration, USA, simulation 9665
    - seed dispersal, land use, simulation 480
  - forestry
    - carbon cycle
      - climatic change
        - Russia 9661
        - World 9661
  - forests, soil, nitrogen cycle, reviews 1953
  - land use, books 8
  - *Nothofagus,* treelines, New Zealand 526
  - phytogeography, Italy, mediterranean climate 6256
  - *Picea abies,* provenance trials, increment, Finland 2791
  - *Pinus sylvestris,* provenance trials, increment, Finland 2791
  - *Prumnopitys ferruginea,* treelines, New Zealand 526
- ***Glochidion multiloculaire,*** tissue culture 7732
- ***Gloeosporidina cryptomeriae,*** fungal diseases, *Cryptomeria japonica,* Japan, damage, symptoms 4864
- ***Glomerella cingulata***
  - fungal diseases
    - *Acacia holosericea,* India 2251
    - *Dalbergia sissoo,* culture media 2283
    - *Lupinus arboreus,* New Zealand 5649
- ***Glomerella miyabeana,*** *Salix,* Sweden 5643
- ***Glomus***
  - mycorrhizas
    - *Acacia nilotica,* seedling growth, root nodules, nitrogen-phosphorus fertilizers 7385
    - *Calamus manan,* planting stock, Malaysia 975
    - *Casuarina equisetifolia* 5600
      - seedling growth 4851
    - Fabaceae
      - India, surveys 3152
      - seedling growth, India 3153
    - *Pithecellobium dulce,* seedling growth 2239
    - rhizosphere, India 3157
  - vesicular arbuscular mycorrhizas, *Acacia,* plant nutrition, growth 2233
- ***Glomus aggregatum***
  - mycorrhizas
    - *Albizia ferruginea,* plant nutrition, phosphorus 5612
    - *Azadirachta indica,* inoculation 4012
    - *Bactris gasipaes,* seedling growth 2250
    - *Enterolobium cyclocarpum,* plant nutrition, phosphorus 5612
- ***Glomus claroideum,*** mycorrhizas, *Casuarina equisetifolia,* forest plantations, age, India 6617
- ***Glomus clarum,*** mycorrhizas, *Casuarina equisetifolia,* forest plantations, age, India 6617
- ***Glomus deserticola***
  - mycorrhizas
    - *Fraxinus excelsior,* micropropagation 5593
    - *Leucaena leucocephala,* seedling growth, plant physiology, plant nutrition 596
    - *Prunus avium,* micropropagation 5593
- ***Glomus etunicatum***
  - mycorrhizas
    - *Erythrina poeppigiana,* plant nutrition, nitrogen 5596
    - *Eucalyptus grandis,* pesticides, toxicity 602
- ***Glomus etunicatum*** *cont.*
  - mycorrhizas *cont.*
    - *Leucaena leucocephala*
      - plant nutrition, nutrient uptake 6614
      - seedling growth 1442
        - plant physiology, plant nutrition 596
- ***Glomus fasciculatum***
  - mycorrhizas
    - *Alnus cordata,* interactions, nitrogen fixing bacteria, *Frankia* 9079
    - *Casuarina equisetifolia*
      - roots, colonization 4011
      - seedling growth 4851
    - *Leucaena leucocephala*
      - plant nutrition, nutrient uptake 6614
      - seedling growth 1442
    - *Morus alba,* phosphorus fertilizers, foliage, quality 7802
- ***Glomus geosporum,*** mycorrhizas, *Casuarina equisetifolia,* forest plantations, age, India 6617
- ***Glomus intraradices***
  - mycorrhizas
    - *Argania spinosa*
      - micropropagation
        - biomass production 3146
        - plant nutrition 3147
    - *Erythrina poeppigiana,* plant nutrition, nitrogen 5596
    - *Fraxinus excelsior,* micropropagation 5593
    - *Leucaena leucocephala,* seedling growth, plant physiology, plant nutrition 596
    - *Prunus avium,* micropropagation 5593
  - vesicular arbuscular mycorrhizas, *Prosopis alba,* USA 4843
- ***Glomus macrocarpum***
  - mycorrhizas
    - *Casuarina equisetifolia,* forest plantations, age, India 6617
    - *Leucaena leucocephala,* rhizosphere fungi 5605
- ***Glomus manihotis,*** mycorrhizas, *Cordia alliodora,* seedling growth 1444
- ***Glomus mosseae***
  - mycorrhizas
    - *Alnus cordata,* interactions, nitrogen fixing bacteria, *Frankia* 9079
    - *Casuarina equisetifolia*
      - forest plantations, age, India 6617
      - seedling growth 4851
    - conifers, inoculation 9076
    - *Erythrina poeppigiana,* plant nutrition, nitrogen 5596
    - *Leucaena leucocephala,* seedling growth 1442
    - *Morus alba,* phosphorus fertilizers, foliage, quality 7802
    - *Populus* 'Beaupré', roots, longevity 10000
- ***Glomus occultum,*** mycorrhizas, *Cordia alliodora,* seedling growth 1444
- ***Glomus versiforme,*** mycorrhizas, *Leucaena leucocephala,* seedling growth 1442
- **Glossaries**
  - English 9321
  - Esperanto 9321
  - French 9321
  - German 9321
    - Russian
      - forest inventories 4167
      - forest management 4167
  - history, France 764
  - Russian 9321
  - Spanish 9321
- ***Glyphaea brevis,*** browse plants, insect pests, Nigeria 8325
- ***Gmelina arborea***
  - afforestation
    - pastures, Costa Rica, stem form, growth 5051
    - site preparation, fertilizers, Indonesia 7781
  - energy value, seasonal variation, India 2541

- ***Gmelina arborea*** *cont.*
  - foliage
    - plant water relations, biomass production, India 8821
    - sugars, photosynthesis 6485
  - forest nurseries
    - containers, seedling growth, survival, Bangladesh 6076
    - fertilizers, sewage, India 6905
  - forest plantations
    - degraded land, reclamation, Philippines 8624
    - forest influences, soil chemistry, lateritic soils, India 8023
    - increment, biomass production, Ghana 5174
    - soil chemistry, nutrient deficiencies, site factors, Costa Rica 4546
    - volume determination, merchantable volume, equations, Nigeria 7669
  - fruits, colour, treatment, seed germination 861
  - growth models, Central America 221
  - increment, site factors, Indonesia 1789
  - plant nutrition
    - nitrogen, foliage, growth, photosynthesis 1133
    - phosphorus, foliage, growth, photosynthesis 1133
  - plant water relations, drought, phenology, Costa Rica 2838
  - reclamation, degraded forests, development, Indonesia 7560
  - seedling growth
    - fertilizers, wood properties 127
    - wood density, nitrogen-phosphorus fertilizers, latosols 134
  - seedlings, wood properties, nitrogen-phosphorus fertilizers, latosols 135
  - shoot cuttings 6063
  - site preparation, forest plantations, increment, Ghana 5131
  - species trials
    - agroforestry, soil properties, soil types, Nigeria 6868
    - reclamation, mine spoil, India 4949
  - tree breeding, progeny testing, heritability, genetic gain, Peninsular Malaysia 7363
- ***Gnathotrichus retusus***
  - insect pests
    - *Pseudotsuga menziesii*
      - USA 7478
        - attractants 4893
- ***Gnetum,*** pollination, Sarawak 8951
- ***Gnetum gnemon***
  - bark, anatomy 3722
  - wood, anatomy 3722
- **Goats**
  - agroforestry, browse, Greece 4117
  - *Capra pyrenaica,* browse, Spain 10058
  - *Quercus coccifera,* agroforestry, Greece 9286
- ***Godasa sidae,*** insect pests, *Mansonia altissima,* Cameroon, biology 9161
- ***Godmania macrocarpa,*** foliage, phenology, photosynthesis, plant water relations, Venezuela 4704
- **Golgi apparatus,** *Acer pseudoplatanus,* plant physiology 454
- ***Gomidesia,*** South America, wood anatomy 6415
- ***Gomidesia regeliana,*** wood anatomy 6430
- ***Gonimbrasia belina,*** insect pests, broadleaves, forest fires, Malawi 7452
- ***Gonioctena occidentalis,*** insect pests, *Salix,* foliage, USA 4032
- ***Gonioctena pallida,*** insect pests, *Salix phylicifolia,* Russia, ecology 2351
- ***Gonipterus gibberus,*** insect pests, Argentina 2301
- ***Gossyparia spuria,*** insect pests, *Ulmus,* USA, parasitoids 5691
- ***Goupia glabra***
  - photosynthesis, soil fertility, Guyana 7193
  - plant water relations, gas exchange, French Guiana 4506
- **Grading**
  - *Abies fraseri,* Christmas trees, prices, USA 9557
- **Grading** *cont.*
  - *Pinus palustris,* planting stock, bare rooted stock 910
  - trees, forest inventories, USA 1815
- ***Graellsia isabellae,*** insect pests, *Pinus sylvestris,* France, resistance, biology 627
- **Grafts, grafting** (*see* Vegetative propagation, grafting)
- **Grain and figure,** *Acer saccharum,* geographical distribution, North America 8861
- **Grants,** afforestation, Argentina 5042
- ***Graphium,*** fungal diseases, *Picea abies,* Norway, insect pests, disease vectors 10014
- **Grazing** (*see also* Rangelands)
  - *Aspidosperma quebracho-blanco,* silviculture, forest management, Argentina 1504
  - bison, *Populus tremuloides,* geographical distribution, Canada 7268
  - conifers, forest plantations, silviculture, France 5876
  - control, *Phylica nitida,* deforestation, nature conservation, Indian Ocean Islands 9297
  - fodder, production, forests, India 682
  - forest trees
    - treelines
      - climate
        - Russia 7277
        - Scandinavia 7277
  - forests
    - France 5884
    - utilization, history, Switzerland 6842
  - land use planning, USA, fishes, freshwater ecology 8357
  - management, landscape ecology, Kazakhstan 4962
  - *Quercus,* firebreaks, Italy 3273
  - *Quercus cerris,* silvicultural conversion, Italy 1558
  - *Quercus coccifera,* maquis, forest fires, Greece 683
  - rangelands, weed control, forest fires 7510
  - savanna woodlands, degraded forests, Tanzania 3905
  - simulation, *Acacia smallii,* plant competition, pot experimentation 7255
  - species trials, forest plantations, France 5884
  - woodland grasslands, improvement, conifers, Japan, cows 4959
- **Grazing effects,** deer, *Cervus elaphus, Pinus sylvestris,* forest ecology, UK 2392
- **Grazing intensity,** woodlands, plant succession, USA 2385
- **Greece**
  - *Abies borisii-regis,* volume determination, estimation, cost analysis 8696
  - agroforestry, browse, goats 4117
  - amenity trees, air pollution, heavy metals, indicator plants 7106
  - *Betula pubescens,* geographical distribution, nature conservation 1575
  - bottomland forests, forest decline, flooding 9236
  - broadleaves
    - coppice, silvicultural conversion, geographical distribution, management 8618
    - stand development 4803
  - *Cupressus sempervirens*
    - genetic variation, population genetics 2190
    - variety trials, site factors, plant morphology 6020
  - *Fagus sylvatica,* synecology, site class assessment 1355
  - flora 1328
  - forest recreation 737
  - forest resources, forest fires, damage 4614
  - forestry development, history 6843
  - fungal diseases, *Seiridium cardinale, Cupressus sempervirens,* resistance 6020
  - geographical distribution, maps, trees, shrubs, Greece 753
- **Greece** *cont.*
  - insect pests, *Matsucoccus josephi, Pinus,* geographical distribution, history 4881
  - mountain forests, synecology 3902
  - palaeoecology, plant succession 8989
  - *Phlomis fruticosa,* foliage, seasonal variation, morphology, physiology 2047
  - *Pinus*
    - essential oils, chemotaxonomy, plant composition 8686
    - ultraviolet radiation, photosynthesis, water stress 7027
  - *Pinus brutia* × *Pinus halepensis,* vegetative propagation, methodology 4274
  - *Pinus leucodermis,* genetic variation, chemotaxonomy 2194
  - *Pinus nigra*
    - epiphytes, lichens, altitude 3945
    - population genetics, isoenzymes 2187
  - *Pinus pinaster*
    - agroforestry, nitrogen-phosphorus fertilizers, spacing 8428
    - site preparation, site factors, fertilizers 7780
  - *Pinus sylvestris,* plant succession, seral stages 541
  - *Quercus,* coppice, silvicultural conversion, geographical distribution, management 8618
  - *Quercus coccifera*
    - agroforestry, goats 9286
    - broadleaved evergreen forests, forest fires, fire ecology 9000
    - maquis, forest fires, grazing 683
  - *Quercus coccinea,* air pollution, dust, photosynthesis, plant water relations 6331
  - *Rosa,* geographical distribution, taxonomy 1352
  - woody plants, flora 1325, 7243
- **Green manures**
  - decomposition
    - *Cassia siamea,* agroforestry, Kenya 5874
    - *Cassia spectabilis,* agroforestry, Philippines 2418
    - *Gliricidia sepium,* agroforestry, Philippines 2418
    - nutrients, multipurpose trees, agroforestry, Togo 8422
  - *Leucaena leucocephala,* agroforestry, soil chemistry, Kenya 3257
  - multipurpose trees
    - Burundi 8679
    - *Swietenia macrophylla,* seedling growth, Indonesia 1711
  - *Swietenia macrophylla,* seedling growth, Indonesia 1711
- **Greenhouse effect**
  - control
    - agroforestry, choice of species, climatic change 2796
    - tropical forests, planting, logging, Sabah 6254
  - deforestation, nitrogen cycle, Costa Rica, estimation 2409
  - forest policy, climatic change, Poland 2797
  - forestry, France 2792
  - forests, carbon cycle, carbon dioxide enrichment, international agreements 3341
  - land use, integrated systems, agroforestry, climatic change 2795
  - peatlands, energy sources 4250
- ***Gremmeniella abietina***
  - fungal diseases
    - conifers 4169
    - defence mechanisms, laboratory tests 9091
    - *Pinus contorta,* Sweden 4867
    - *Pinus sylvestris*
      - acid deposition 8304
      - air pollution, Europe, damage 9118
      - Finland 5639-5640, 10010
        - insect pests, pest resistance 660
      - natural regeneration, damage, Finland 10061

***Gremmeniella abietina* cont.**
  fungal diseases *cont.*
    Pinus sylvestris cont.
      pollution 9117
      stand density, Finland 1461
Grevillea
  savannas, ecotones, soil chemistry, Australia 3087
  shelterbelts, crops, India 710
  vegetative propagation, shoot cuttings, roots 2582
Grevillea baileyana, afforestation, mixtures, degraded land, reclamation, Australia 3233
Grevillea banksii, forest nurseries, sowing, growing media, India 140
Grevillea robusta
  agroforestry, species trials, Rwanda 4961
  ecology, silvicultural characters, silviculture, protection, utilization 6385
  forest nurseries, planting stock, root pruning, India 145
  fungal diseases, Pakistan, seeds 2257
  green manures, Burundi 8679
  multipurpose trees, silviculture, tree breeding, agroforestry, conferences 2462
  tissue culture, micropropagation 5098
  urban forestry, beekeeping, South Africa 6951
Grevillea steiglitiziana, sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954
Grewia, taxonomy, China 2119
Grewia oppositifolia, fodder, choice of species, Nepal 6948
Grewia optiva
  defoliation, foliage, biomass production, increment, India 6147
  increment, heritability, India, correlation analysis 9982
  seedling growth, species trials, India 63
Grewia serrulata, multipurpose trees, fibre plants, India 2678
Grewia tenax, browse, indigenous knowledge, Kenya 6669
Griselinia littoralis, foliage, frost resistance, plant anatomy, New Zealand, damage 8761
Ground vegetation
  Abies, USA 6557
  Acacia erubescens, canopy, woodland grasslands, South Africa 359
  allelopathy, *Pinus sylvestris,* natural regeneration, seed germination, Sweden 9913
  biomass production
    Shorea robusta, synecology, India 9933
    Tectona grandis, synecology, India 9933
    tropical forests, synecology, India 9933
  boreal forests
    Canada, *Lepus americanus* 9227
    forest fires, fire danger, Canada 9770
    nitrogen fertilizers, humus, Finland 5456
  Chamaecyparis obtusa, thinning, Japan, *Rubus palmatus,* growth 1391
  Combretum apiculatum, canopy, woodland grasslands, South Africa 359
  coniferous forests
    amelioration of forest sites, Germany 8166
    biomass, Slovakia 9011
    Slovakia 7303
  conifers, biomass, Slovakia 9946
  control, water stress, soil water, growth 6907
  development, multipurpose trees, reclamation, degraded forests, Indonesia 7560
  Fagus sylvatica
    Germany, heavy metals, uptake 8165
    plant nutrition, acid deposition, Sweden 3755
    soil chemistry
      exchangeable cations, Sweden 7885
Ground vegetation *cont.*
  Fagus sylvatica cont.
    soil chemistry *cont.*
      France 3090
    Sweden, soil, acidification 8164
  forest decline, air pollution, synecology, synecology, Czechoslovakia 339
  forest influences, nature conservation, Germany, weeds, fields 4964
  forest trees
    fertilizers, lime, Germany 8591
    plant competition, soil fertility, roots, theory 3875
  fungicides, nontarget effects, *Pseudotsuga menziesii,* USA 6640
  indicator species, Germany 9948
  Juniperus pinchotii, forest influences, soil types, USA 6556
  Picea abies
    fertilizers
      forest decline, Germany 9463
      forest litter, Austria 4304
    nitrogen cycle, soil chemistry, Sweden, methodology 1145
  Picea glauca, site class assessment, soil properties, plant composition, Canada 8704
  Pinus contorta, plant competition, Canada 1745
  Pinus palustris, controlled burning, ecology, USA 7135
  Pinus resinosa, gas exchange, soil biology, Canada 7128
  Pinus roxburghii, forests, deforestation, synecology 535
  Pinus sylvestris
    humus, soil chemistry, plant succession, Netherlands 6280
    stand characteristics, roots, biomass production, Finland 7152
    synecology
      species diversity, Spain 3942
      UK, lichens 1359
  Pinus taeda, silvicultural systems, natural regeneration, USA 6099
  Populus tremula, epiphytes, bark, chemistry, Sweden 8168
  Quercus leucotrichophora, forests, deforestation, synecology 535
  Quercus petraea, soil chemistry, France 3090
  Quercus pyrenaica, dehesa grasslands, Spain 1384
  rain forests, Mexico 6558
  Salicaceae, short rotation forestry, Germany 6554
  soil pH, Belgium 9691
  soil water, soil pH, Germany, indicator plants 8167
  species diversity, deciduous forests, plant succession, Poland 3943
  synecology
    forest borders, Europe 9012
    Quercus pyrenaica, dehesa grasslands, agroforestry, Spain 8433
  tropical forests, canopy gaps, cycling, India 4785
Groundwater
  Alnus glutinosa, soil chemistry, geographical information systems, Germany 8163
  Casuarina, vegetation, history, Australia 2126
  Eucalyptus globulus, agroforestry, Australia 7579
  fens, soil chemistry, botanical composition, Germany 8163
  forest trees, sap, isotopes, oxygen, South Africa 2832
  Melaleuca, agroforestry, Australia 7579
  Picea sitchensis, fertilizers, sewage, UK 895
  Pinus sylvestris
    increment, Germany 4524
    yield forecasting, Belarus 8714
  Prosopis velutina, USA, water stress 309
Groundwater level, control, *Eucalyptus camaldulensis,* agroforestry, USA 5870-5872
Group system (*see* Silvicultural systems, group fellings)
Growing media
  peat
    soil water movement
      container grown plants 6902
      forest nurseries, container grown plants 6901
Growing stock
  forest inventories, Germany 4435
  forest management, simulation, Netherlands 4429
  forest trees, stand characteristics, Finland 4396
  Pinus sylvestris, stand structure, Finland, volume, increment 4397
  stand density, *Pinus taeda,* USA 2639
Growth models (*see also* Increment, growth models)
  computer software, USA 802
  conifers
    climatic change, USA 8705
    forest plantations, stand density, equations 9586
    increment, plant competition, USA 7675
    Japan 1836
    mixtures, Japan 2700
  Cryptomeria japonica, Japan, volume 6176
  Eucalyptus, yield forecasting, Australia 6193
  Eucalyptus saligna, site factors, Cameroon 8701
  Eucalyptus tereticornis, forest plantations, sample plot technique 6210
  Fagus sylvatica, plant competition, France, light, water availability 4753
  forest ecology, deciduous forests, USA, stress analysis 4223
  forest inventories
    evaluation 6215
    sample plot technique, methodology 3338
  forest management, sustainability, information needs, site class assessment, India 5189
  forest plantations, stand development, yield forecasting, Germany 4222
  forest trees
    crown, volume 4219
    forest plantations, diameter, increment, plant competition 9598
    methodology 4207
    plant competition, plant physiology, simulation, conferences 4179
    stand characteristics
      algorithms 4220
      USA, forecasting 4221
    stand density, natural thinning 9538
    stand development
      methodology 4216
      natural thinning 5963
    stems 1820
    uncertainty, analysis 4217
  Fraxinus excelsior, crown, morphology, France, measurement 9585
  genetic gain, simulation, USA, *Pinus ponderosa* 3337
  height
    conifers, advance growth, Finland 6971
    mathematics 6179
  increment
    height, site factors 9366
    Pinus strobus, USA 8509
    Pseudotsuga menziesii, USA 8509
  mixed forests, Tropics, books 1595
  Picea abies
    forest plantations, sample plot technique 6210
    height, mountain forests, France 4204
    stems, France, morphology 5018
    wood properties, site factors, quality 8863
  Pinus caribaea, thinning, Australia, economic evaluation 8648
  Pinus palustris, thinning, USA 4393
  Pinus pinaster, methodology, mathematics 4202
  Pinus radiata, forest management, New Zealand, development 4225

- **Growth models** *cont.*
  - *Pinus resinosa*
    - forest plantations, thinning, yield forecasting, Canada 5966
    - plant physiology 4208
  - *Pinus sylvestris,* climatic factors 7821
  - *Pinus taeda,* forest inventories, assessment, monitoring 6192
  - *Pseudotsuga menziesii,* plant competition, Canada 9361
  - *Quercus rubra,* Germany 9595
  - research 9367
  - reviews 6178
  - *Salix viminalis,* biomass, nitrogen, Sweden 4210
  - secondary forests, forest management, research, Australia 6833
  - silviculture, stand structure, simulation 4199
  - statistical analysis 6214
  - *Tectona grandis,* forest plantations, sample plot technique 6210
  - tropical forests, reviews 5017
  - yield forecasting 9601
- **Growth rings**
  - *Abies lasiocarpa,* branches, biomass, USA 2963
  - *Acacia,* wood anatomy, Africa, rain 396
  - conifers, wood chemistry, dendrochronology 7616
  - *Cryptomeria japonica,* distribution, simulation 4194
  - dendrochronology, increment, basal area, equations 7665
  - *Fagus sylvatica,* wood chemistry, Germany, nickel, seasonal variation 2976
  - *Faidherbia albida,* wood anatomy, Africa, rain 396
  - forest trees, stem form, canopy, simulation 4209
  - leaning stems, *Pinus wallichiana,* earthquakes, India 4605
  - measurement, microscopy, techniques 6815
  - *Picea abies*
    - plant nutrition, cadmium, zinc 2955
    - soil pollution, heavy metals 6457
  - *Picea mariana,* air pollution, mercury, Canada 9737
  - *Pinus*
    - genetic variation, isoenzymes, Russia 8193
    - wood chemistry, Italy 1249
  - *Pinus wallichiana,* roots, variation 6416
  - *Quercus petraea,* wood anatomy, Poland 4636
  - *Quercus robur,* Germany, cadmium 6458
  - *Tsuga heterophylla,* wood density, USA 1178
  - wood anatomy, image analysis, computer techniques 22
  - wood properties, correlation, statistical analysis 31
- **Growth stress**
  - *Abies fraseri,* Christmas trees, stems, splitting 3467
  - cell walls
    - *Cryptomeria japonica* 1177
    - *Liriodendron tulipifera* 1177
  - forest trees, maturation, mechanics, theory, simulation 4635
  - reaction wood, simulation 4590
  - simulation, cell walls 6359
- **Guadeloupe**
  - forest trees, gas exchange, light, adaptation 4682
  - forestry, forest management, reviews 812
  - mangroves, epiphytes, Cyanobacteria, nitrogen fixation 537
  - rain forests, wind damage 1063
  - tropical forests, natural regeneration, hurricanes 4796
- ***Guaiacum officinale,*** agroforestry, Haiti 1563
- ***Guarea cedrata,*** essential oils, bark, Central African Republic 6439
- ***Guarea grandifolia,*** rain forests, Mexico, wood anatomy 1211
- ***Guarea guidonia,*** rain forests, wind damage, Puerto Rico 3561
- **Guatemala**
  - agroforestry, development projects, databases 10109
  - *Casuarina cunninghamiana,* growth models 219
  - *Chamaedorea tepejilote,* uses 193
  - coniferous forests, forest ecology, altitude 5448
  - *Eucalyptus saligna,* growth models 222
  - fungal diseases, *Cronartium conigenum, Pinus maximinoi,* cones, histology 9090
  - landscape ecology, tropical forests, remote sensing 6997
  - *Leucaena,* gums, exudates, chemistry, provenance 2979
  - *Leucaena leucocephala,* genetic variation, isoenzymes 590
  - medicinal plants, ethnobotany 983
  - mountain forests, synecology 3079
  - phytogeography, subalpine forests, Costa Rica 6537
  - rain forests, nature reserves, nature conservation 2425
- ***Guazuma crinita,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Guazuma tomentosa,*** plant parasitic nematodes, *Meloidogyne,* shade trees, crops, Cuba 1496
- ***Guazuma ulmifolia***
  - plant water relations, drought, phenology, Costa Rica 2838
  - seedlings, morphology, identification, secondary forests, Peru 6431
- ***Guettarda poasana,*** flowers, nectar, antifungal properties 1250
- ***Guibourtia tessmanii,*** bark, glycosides 9808
- ***Guiera senegalensis***
  - agroforestry, Niger, cattle, grazing, management 4960
  - savannas, light, Niger, simulation 3546
- ***Guignardia aesculi,*** fungal diseases, *Aesculus hippocastanum,* Austria 9158
- ***Guignardia candeloflamma***
  - fungal diseases
    - Arecaceae, Indonesia 8307
    - *Pinanga,* Australia 8307
- ***Guilfoylia monostylis,*** seed germination, temperature 9435
- **Guinea**
  - deforestation, history, sociological analysis 8536
  - forest resources, land use, forest management 5033
  - forest trees, hedges, land use 9242
  - forestry, land use, nature conservation, history 8537
  - *Laguncularia racemosa,* shoots, growth, morphology 9782
  - medicinal plants, books 2446
  - reserved forests, history, nature conservation, sociology 1634
  - savanna woodlands, forest management, development projects 9604
  - tropical forests
    - forest management
      - development projects 9604
      - planning 8520
- **Gums**
  - *Acacia senegal,* Africa, production, economics 8675
  - chemistry
    - *Acacia,* marsupials, Australia 2978
    - rheological properties, *Leucaena leucocephala,* seeds, edible species 430
  - exudates
    - chemistry
      - *Leucaena*
        - provenance
          - Guatemala 2979
          - India 2979
          - USA 2979
- **Gunfire and bomb damage,** forest fires, history, Germany 9381
- ***Gustavia superba***
  - insect pests, *Carmenta foraseminis,* seeds, Panama 7458
  - seedlings, light, Panama, predation, growth 3100
- **Guyana**
  - broadleaves, photosynthesis, soil fertility 7193
  - *Mora,* flooding tolerance, drought resistance, plant water relations 9716
  - *Mora gonggrijpii,* seedling growth, plant water relations, light 1222
  - rain forests, soil properties, classification 7274
- ***Gymnacranthera contracta,*** seeds, fatty acids, triacylglycerols 2974
- ***Gymnobelideus leadbeateri***
  - marsupials
    - *Eucalyptus*
      - Australia, population dynamics 5818
      - wildlife conservation, Australia 9216
    - forest fires, Australia, simulation models 9225
    - forest management, nature conservation, Australia 4967
- ***Gymnocladus,*** root nodules, surveys 2235
- ***Gymnocladus dioica***
  - forest nurseries
    - tree guards
      - increment, USA 442
      - plant water relations, USA 442
  - transplanting, plant water relations, USA 5909
- **Gymnosperms,** embryology, evolution 2940
- ***Gymnostoma,*** geographical distribution, site factors, plant nutrition, New Caledonia 8887
- ***Gymnostoma papuanum,*** epidermis, crystals, calcium oxalate 5382
- ***Gymnostoma sumatranum,*** wood anatomy 414
- ***Gynanisa maja,*** insect pests, broadleaves, forest fires, Malawi 7452
- ***Gynocardia odorata,*** wood anatomy, rays 2029
- **Habit**
  - *Anodopetalum biglandulosum,* synecology, canopy gaps, Australia 2012
  - *Banksia menziesii,* reproductive behaviour, plant water relations, Australia 3032
  - *Betula pendula,* shoots, vegetative propagation, UK 410
  - broadleaves, plant morphology, taxonomy, Poland 1207
  - *Clusia rosea,* photosynthesis, metabolism, United States Virgin Islands 4700
  - conifers, plant morphology, taxonomy, Poland 1206
  - forest trees
    - branches, foliage, New Zealand 4620
    - carbon dioxide enrichment, simulation 7863
    - climbers, synecology, South Africa 3946
    - plant morphology, taxonomy, Poland 1322
    - taxonomy, plant morphology, Poland 2114-2115
  - *Heteromeles arbutifolia,* foliage, respiration, light, dark 6474
  - internodes, site factors, *Pinus radiata,* New Zealand, simulation 3710
  - *Lepechinia fragrans,* foliage, respiration, light, dark 6474
  - *Lonicera,* light, biomass 3550
  - mangroves, *Rhizophora mangle,* plant physiology, salinity, plant nutrition 465
  - *Mikania cordata,* reproductive behaviour 5369
  - mites, *Panonychus citri, Ilex crenata,* Japan, population dynamics 667
  - multipurpose trees, branching, India 2037
  - *Picea abies,* shoot cuttings, increment, Finland 866
  - *Pinus sylvestris*
    - genetic variation, Germany 8209
    - population genetics, Poland 9975
  - *Rhizophora mangle,* water uptake, USA 3609
  - sclerophyllous forests, reproductive behaviour, Chile 3839
  - seed size, Australia 2938

- **Habit** *cont.*
  - shrubs, sclerophyllous scrub, Spain 3705
  - *Vaccinium,* canopy, Finland 8039
  - variation, *Umbellularia californica,* foliage, chemistry, flavonoids 8091
  - woody plants, branches, foliage, New Zealand 4620
- ***Haematoloma dorsatum,*** insect pests, conifers, Italy, ecology 9141
- **Haiti**
  - agroforestry, erosion control, watershed management, development projects 7581
  - *Leucaena leucocephala,* genetic variation, isoenzymes 590
  - multipurpose trees, agroforestry 1563
  - *Prosopis juliflora*
    - shoot cuttings
      - fogging
        - equipment 2596
        - growing media 2596
- ***Hakea constablei,*** seeds, mortality, fire effects, Australia 2917
- ***Hakea dactyloides,*** seeds, mortality, fire effects, Australia 2917
- ***Hakea gibbosa,*** seeds, mortality, fire effects, Australia 2917
- ***Hakea propinqua,*** seeds, mortality, fire effects, Australia 2917
- ***Hakea sericea,*** seeds, mortality, fire effects, Australia 2917
- ***Hakea teretifolia,*** seeds, mortality, fire effects, Australia 2917
- ***Haliaeetus leucocephalus***
  - birds
    - mangroves, USA, nesting 3197
    - USA, habitats 6685
- ***Halophytophthora***
  - marine fungi
    - mangrove forests, forest litter, Bahamas 9066
    - salt marshes, forest litter, USA 9066
- **Hamamelidaceae,** books 3294
- **Hamamelidae,** phylogeny, pollen, hydroxycinnamoyl spermidines 8234
- ***Hamelia patens***
  - mites
    - *Proctolaelaps kirmsei*
      - nectar, consumption, Costa Rica 10051
      - pollen, consumption, Costa Rica 10052
- ***Haplolobus***
  - taxonomy
    - Sabah 7226
    - Sarawak 7226
- **Hardening**
  - *Leptospermum scoparium,* cold resistance, temperature, New Zealand, variation 8762
  - *Pinus resinosa,* nitrogen fertilizers, plant nutrition, plant water relations 4305
- **Hares**
  - *Lepus americanus*
    - boreal forests
      - Canada, herbicides 4060
      - ground vegetation, Canada 9227
- ***Harknessia hawaiiensis,*** fungal diseases, *Eucalyptus,* Madagascar, foliage 7403
- **Harrows,** site preparation, Canada, work study 9547
- **Health**
  - air pollution, ozone, forestry workers, Germany 5045
  - chainsaws
    - petroleum hydrocarbons 6007
    - sawdust 6007
  - forestry workers, safety, Finland 3359
  - human diseases, fungi, isolation, *Cryptococcus, Eucalyptus,* Colombia 7713
- **Heartwood**
  - chemistry, *Juniperus virginiana,* dendrochronology, acid deposition, USA 4141
  - *Cryptomeria japonica,* sapwood, Taiwan, formation 6395
  - estimation, weight, *Santalum album,* natural regeneration, Indonesia 6162
  - *Eucalyptus,* roots, mechanics, Australia 6405
- **Heartwood** *cont.*
  - forest trees, injuries, discoloration, wood chemistry, trace elements 8092
  - formation
    - prevention, *Fagus sylvatica,* silviculture, Poland 1180
    - *Santalum album,* forest plantations, soil properties, Indonesia 1985
    - *Schinopsis balansae,* tannins 2015
  - *Picea abies,* increment, diameter, age of trees, Estonia 1183
  - *Pseudotsuga menziesii,* volume determination, equations 989
  - *Quercus,* wood chemistry, age, tannins 8090
  - *Schinopsis balansae,* wood chemistry, extractives 6459
- **Heat resistance,** *Prosopis chilensis,* biochemistry 3798
- **Heat stress**
  - broadleaves, carbon dioxide enrichment, plant nutrition, interactions 3547
  - street trees, foliage 8758
- **Heat tolerance,** *Picea rubens,* plant physiology, USA, geographical distribution 4478
- **Heavy metals,** forests, pollution, Germany 5339
- ***Hebeloma crustuliniforme***
  - mycorrhizas
    - *Picea abies*
      - cell culture, plant physiology 447
      - induction, cell culture, callus 8258
      - plant nutrition 5569
    - *Pinus,* radionuclides, uptake 4007
    - *Pinus ponderosa*
      - forest nurseries, Argentina 4009
      - roots, translocation 4004
- ***Hebeloma cylindrosporum***
  - mycorrhizas
    - *Pinus,* seedlings, plant growth regulators, IAA 2246
    - *Pinus pinaster*
      - morphology 5584
      - plant growth regulators, IAA 8284
    - *Pinus sylvestris,* tissue culture 1691
    - *Quercus,* morphology 6613
- ***Hebeloma edurum,*** mycorrhizas, *Pinus halepensis* 8285
- ***Hedera***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- **Hedges**
  - agriculture, conservation, UK, conferences 7643
  - birds
    - *Columba palumbus,* farm woodlands, UK, control 1509
    - ecology, land use, UK, species diversity 8369, 8372
  - botanical composition, birds, species diversity, Italy 6702
  - forest trees, land use, Guinea 9242
  - habitats, insects, *Abax parallelepipedus,* France, landscape ecology 7555
  - history
    - Europe 5844
    - silviculture, Denmark 5847
  - landscape, policy, France 5846
  - replanting, rural areas, France 5845
  - species diversity, UK 5848
- ***Hedyosmum,*** choice of species, forestry development, South America 2551
- ***Hedysarum fruticosum,*** site class assessment, China 9600
- ***Hedysarum scoparium,*** site class assessment, China 9600
- **Height**
  - Arecaceae, foliage, morphology, Costa Rica 5376
  - broadleaves, diameter, France, equations 4405
  - equations
    - *Eucalyptus globulus,* coppice, Chile 3325
    - palaeobotany 512
  - estimation, forest trees, forest inventories, South Africa, equations 212
- **Height** *cont.*
  - *Eucalyptus deglupta,* progeny testing, Costa Rica 9985
  - *Eucalyptus grandis,* site class assessment, equations, increment, South Africa 7824
  - fire danger, fuels, forest plantations, Canada 6957
  - forest plantations, increment, climate, Spain 1826
  - forest trees
    - diameter, simulation, statistical analysis 1617
    - growth models 4395
    - stems, equations 1830
  - growth models
    - mathematics 6179
    - *Pseudotsuga menziesii,* plant competition, weed control, USA 2710
  - increment, *Paulownia,* India 156
  - measurement
    - equipment 7649
    - instruments 3314
    - tropical forests 3313
  - multipurpose trees, fuel plantations, India, equations 1615
  - *Nothofagus pumilio,* Argentina, equations 6170
  - *Picea abies*
    - growth models, mountain forests, France 4204
    - increment, equations, Poland 6976
  - *Picea mariana,* advance growth, yield forecasting, Canada 9491
  - *Pinus contorta,* bark, thickness, variation, Sweden 990
  - *Pinus sylvestris*
    - form factors, diameter, Poland 994
    - wood properties, Poland, equations 3681
  - *Pinus thunbergii,* increment, Japan 6973
  - *Populus,* short rotation forestry, Western Europe, border effects 8700
  - *Pseudotsuga menziesii,* provenance, growth, analysis 4203
- **Height classes**
  - conifers, USA 229
  - *Pseudotsuga menziesii,* Canada 230
- ***Helicotylenchus dihystera,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Heliocarpus appendiculatus***
  - foliage, age, light, plant nutrition, photosynthesis 6491
  - seedlings, light, canopy gaps, crown, Mexico 7023
  - tropical forests, light, plant physiology 6259
  - wood density, wood anatomy, Costa Rica 8900
- ***Heliocarpus pallidus,*** seedling growth, plant nutrition, nutrient availability 6309
- ***Heliocarpus papayanensis,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Helminthosporium,*** fungal diseases, *Eucalyptus,* Indonesia, control 2280
- ***Helopeltis antonii,*** insect pests, *Eucalyptus,* Indonesia, buds 1481
- ***Hemiberlesia lataniae,*** insect pests, *Acacia saligna,* simulation, Israel, parasites 7443
- **Hemicelluloses,** lignin, cellulose, affinity 1245
- ***Hemiptelea,*** geographical distribution 1350
- **Hemiptera**
  - insect pests
    - amenity trees, USA, control 5783
    - *Fraxinus,* Iran, natural enemies 635
    - *Salix,* Iran, natural enemies 635
- **Herbicide residues,** *Acer saccharum,* foliage, Canada 5139
- **Herbicide resistance**
  - bilanafos
    - conifers
      - photosynthesis, plant nutrition 5138
      - plant morphology, seedling growth 5137

Herbicide resistance *cont.*
- glyphosate, *Populus alba × Populus* 'Crandon', genetic transformation, photosynthesis, increment 6605

Herbicides
- *Acer macrophyllum,* woody weeds, USA, statistical analysis 9515
- aerial application, forests, Canada, simulation 9365
- bilanafos 164
- birds, rights of way, woody weeds, USA 165
- broadleaves
  - control, woody weeds, USA 1766-1767
  - mulches, plant nutrition, Canada 5135
  - weed control, USA, equipment 4345
- forest management, weed control, USA 1768
- forest trees
  - forest nurseries, UK, tolerance 2644
  - UK, tolerance 2645
- forestry, USA 1762
- glyphosate, residues, deciduous forests, USA 5143
- *Larix decidua,* genetic transformation, insect pests, resistance 4834
- metabolic detoxification, *Picea abies,* foliage, enzymes 4705
- mycorrhizas, *Glomus etunicatum, Eucalyptus grandis,* toxicity 602
- phenoxy herbicides, water pollution, Denmark, regulations 7789
- phytotoxicity
  - broadleaves, weed control, USA 942
  - *Carya illinoinensis,* forest plantations, weed control, USA 172
  - *Juglans nigra,* forest plantations, weed control, USA 172
  - *Pinus caribaea,* forest plantations, weed control, Cuba 1763
  - *Pinus taeda* 2649
  - *Quercus,* forest plantations, weed control, USA 172
- *Pinus ponderosa,* weed control, woody weeds, USA 4343
- *Populus deltoides,* forest plantations, weed control, USA 173
- *Populus tremuloides,* major elements, Canada 7975
- *Prunus serotina,* control, woody weeds, Germany 9513
- residues, *Abies nordmanniana,* soil, Denmark 8797
- spraying equipment, site preparation, Canada 2641
- triclopyr, uptake, *Acer rubrum,* water stress 9512
- uptake, *Buxus sempervirens* 7788
- weed control, France 8639
- wildlife, birds, forest trees, Canada 5829
- woody weeds, control, *Pinus taeda,* USA 6125

Heritiera fomes
- adaptation, foliage, anatomy, chlorophyll, India 9790
- mangrove forests, increment, diameter, natural regeneration, Bangladesh 6177
- mangroves, chromosomes, India 8235
- natural regeneration, crabs, Bangladesh 7257
- underplanting, mangroves, forest plantations, sustainability, Bangladesh 6108

Heritiera littoralis
- mangroves
  - chromosomes, India 8235
  - foliage, Kenya, chemistry 4676

Heritiera macrophylla, mangroves, chromosomes, India 8235

Heritiera utilis
- forest plantations, silviculture, Côte d'Ivoire 9495
- fungal diseases, Africa, damage, surveys 10030
- insect pests
  - Cerambycidae, Africa, damage, surveys 10030
  - Cossidae, Africa, damage, surveys 10030

Heterarthrus alnivorus, insect pests, *Alnus matsumurae,* Japan 665

Heterarthrus betulae, insect pests, *Betula ermanii,* Japan 665

Heterarthrus subflavipes, insect pests, *Alnus maximowiczii,* Japan 665

Heterobasidion annosum
- fungal diseases
  - *Abies*
    - USA 607
      - control 615
  - *Abies alba,* Italy 608
  - *Abies amabilis,* Canada 2263
  - *Abies religiosa,* Mexico 7397
  - conferences 3311
  - conifers
    - USA 606
      - spread 9095
  - defence mechanisms, laboratory tests 9091
  - *Picea,* UK, resistance 4571
  - *Picea abies*
    - cell culture
      - callus 8258
      - plant physiology 447
    - defence mechanisms 5629
    - Denmark, control 10005
    - Germany 4859
    - Switzerland 6628
    - thinning, Sweden 5624-5625
  - *Picea sitchensis*
    - spread 2262
    - UK 2263
      - control, economics 3169
  - *Pinus,* resistance, enzymes 5628
  - *Pinus resinosa,* Canada 9101
  - *Pinus sylvestris*
    - Poland, resistance, natural regeneration 1454
    - roots, decay, anatomy 7396
    - UK, damage 9099
  - Sweden, resistance 9102

Heteromeles arbutifolia, foliage, respiration, light, dark, habit 6474

Heteropsylla cubana
- insect pests
  - *Leucaena*
    - India
      - resistance 629
      - species trials 629
    - Malawi 6649
    - parasitoids 7439
    - Réunion, surveys, methodology 9139
  - *Leucaena leucocephala*
    - Africa 2312
    - Colombia 7444
    - Indonesia, control 1503

Heterosis, *Pinus pinaster,* hybrids, provenance trials, France, combining ability 9971

Hevea brasiliensis
- insect pests, *Sinoxylon conigerum,* Malaysia, wood chemistry, effects 6659
- seeds, fishes 9233
- wind, movement, simulation, mechanics 4642

Hevea spruceana, seeds, fishes 9233

Hibbertia montana, seed germination, temperature 76

Hibbertia stricta, sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954

Hibiscadelphus woodii, taxonomy, USA 7237

Hibiscus glaber, plant water relations, drought resistance, Japan 311

Hibiscus populanaeous, species trials, mangrove forests, Bangladesh 6017

Hibiscus rosa-sinensis, multipurpose trees, fibre plants, India 2678

Hickelia, bamboos, taxonomy 8966

Himalayacalamus hookerianus
- bamboos
  - taxonomy
    - India, utilization 8453
    - ornamental woody plants
      - New Zealand 8453
      - UK 8453

Hippophae rhamnoides
- biomass production, India, equations 789
- forests, energy balance, evapotranspiration, China 8161
- fruits, plant oils, terpenoids 9812
- root nodules, *Frankia,* foliage, France, nutrients 1909
- site class assessment, China 9600

Hirtella glandulosa, wood anatomy 6430

Hirtella martiana, wood anatomy 6430

Histology
- broadleaves, root nodules 5586
- fungal diseases, *Ceratocystis fimbriata, Platanus acerifolia,* defence mechanisms 2268
- *Juglans nigra × Juglans regia,* vegetative propagation, physiology, age 443
- mangroves, *Kandelia candel,* salt tolerance 9671
- *Pinus sylvestris,* nutrient deficiencies, nitrogen, foliage, chemistry 8822
- trichomes, *Betula,* plant composition, resins, defence mechanisms 2985

History
- *Abies alba,* Italy 806
- afforestation
  - Europe 2476
  - Germany 9501
- agroforestry
  - Mexico, reviews 4111
  - socioeconomics, Developing Countries 5886
- biographies, Germany 5969
- birds, nature conservation, Czech Republic 6840
- broadleaves, phenology, UK 6393
- cooperatives, Germany 4235
- deforestation, Pakistan 6848
- degraded forests, Germany 808
- dendrometers, increment, diameter 4387
- development, agroforestry, China 10106
- environment, periodicals 4995
- experimental plots, Germany 5997
- forest administration
  - Germany 4235, 9385
  - Poland 1625
- forest fires
  - gunfire and bomb damage, Germany 9381
  - North America, sediment, analysis 3701
  - vegetation types, USA, mountain areas 7131
- forest management
  - forest policy, USA, national forests, books 5927
  - sustainability, yield regulation 8513
- forest policy, Sweden 4236
- forest resources, Germany 4234
- forest trees
  - flora, domestication, New Zealand 2131
  - research, Zimbabwe 6861
- forestry
  - Europe 5976-5977
    - sociology 9384
  - Germany 6844
    - environment 4235
    - methodology 9382
  - India 7695
    - books 4155
  - land use, nature conservation, Guinea 8537
  - metallurgy, Germany 6722
  - Sweden 5973
- forestry development
  - Greece 6843
  - Portugal 1626
  - Russia 4235
- forests
  - China, railways, construction 7697
  - deforestation, land use, Pakistan 5859
  - utilization, grazing, Switzerland 6842
- glossaries, France 764
- hedges, Europe 5844
- insect pests, *Lymantria dispar,* North America 2333
- *Juniperus occidentalis,* plant colonization, USA 6564
- land clearance, planning, Germany 4235

History *cont.*
- land use, upland areas, deforestation, Philippines 8402
- landscape
  - forests, UK 5903
  - Germany 4231
  - maps, Germany 8525
- *Lophira alata,* rain forests, pollen analysis, Cameroon 2130
- maps, forest management, Germany 9614
- marking, tools, Italy 211
- nature reserves, research, Germany 9303
- *Pinus sylvestris,* silvicultural systems, Germany 915
- pollen analysis, vegetation, climate, USA 513
- private forestry, Germany 4235
- *Quercus*
  - agroforestry, Germany, economics 782
  - seeds, periodicity, Germany 782
- reserved forests, nature conservation, sociology, Guinea 1634
- *Sacoglottis gabonensis,* rain forests, pollen analysis, Cameroon 2130
- selection system, Europe 912
- shelterbelts
  - Europe 5844
  - silviculture, Denmark 5847
- silvicultural systems, Germany 5972
- silviculture
  - forest ecology 4323
  - theory 3430
- sociological analysis, deforestation, Guinea 8536
- tree breeding, Germany 4230
- tropical forests
  - deforestation, Brazil, books 6779
  - forest management, India, ecology 5031
  - Latin America, books 4150
- urban forestry, Czech Republic, green belts, management 10141
- wind damage, Germany 9383

Holarrhena pubescens
- forest litter, decomposition, India 1917
- understorey, stand characteristics, India 5471

Holoptelea, geographical distribution 1350

Holoptelea integrifolia
- geographical distribution 1350
- seed germination 843

Holotrichia serrata, insect pests, *Tectona grandis,* forest nurseries, Sri Lanka, chemical control 5782

Homalium aylmeri, browse plants, insect pests, Nigeria 8325

Homalium laoticum, wood anatomy, rays 2029

Homalodisca coagulata, insect pests, ornamental woody plants, biology 8329

Honduras
- agroforestry, development projects, databases 10109
- *Casuarina cunninghamiana,* growth models 219
- *Leucaena leucocephala,* genetic variation, isoenzymes 590
- tropical forests, forest management, development projects 9607

Honey bees, *Eucalyptus,* woodlands, birds, Australia 8356

Honeydew, production, *Pinus sylvestris,* insects, Germany 8681

Hong Kong
- insect pests, *Nephopterix syntaractis, Avicennia marina,* defoliation 10038
- mangrove forests, fungi 7384
- urban forestry, mortality, fish pond soils, toxicity 10144

Hopea helferi
- ectomycorrhizas, *Pisolithus tinctorius,* Peninsular Malaysia, growth 3148
- mycorrhizas, plant nutrition, seedlings 4847

Hopea mengarawan, seedlings, identification, Indonesia 1324

Hopea odorata
- ectomycorrhizas, *Pisolithus tinctorius,* Peninsular Malaysia, growth 3148

Hopea odorata *cont.*
- mycorrhizas
  - *Boletus,* nutrient uptake, seedlings 1448
  - plant nutrition, seedlings 4847
  - *Russula,* nutrient uptake, seedlings 1448
  - *Scleroderma columnara,* nutrient uptake, seedlings 1448
- tissue culture, culture media, micropropagation 8583

Hoplolaimus seinhorsti, plant parasitic nematodes, *Leucaena leucocephala,* India 1497

Horsfieldia irya, seeds, chemistry 8920

Houttuynia cordata, wood anatomy, phylogeny 8073

Hovenia tomentosa, mycoplasmal diseases, Japan, damage 4874

Humboldtiella arborea, plant water relations, drought resistance, Venezuela 3594

Humidity, *Anacardium excelsum,* transpiration, Panama 3614

Humus
- boreal forests, nitrogen fertilizers, ground vegetation, Finland 5456
- chemistry, *Picea abies,* fertilizers, lime, boron fertilizers, plant nutrition, Finland 2616
- development, *Pinus sylvestris,* plant succession, Netherlands 5260
- *Fagus sylvatica,* soil biology, Oligochaeta, France, variation 7877
- forest soils, soil acidity, Norway 9692
- formation, forest trees, volcanic soils, Japan 5261
- measurement, decomposition, fungi, *Pinus,* South Africa 294
- *Picea abies,* Oligochaeta, fertilizers, lime, acid deposition 1105
- *Pinus halepensis,* soil biology, Spain 1102
- *Pinus sylvestris,* soil chemistry, ground vegetation, plant succession, Netherlands 6280
- soil classification, France, systems 1918

Hungary
- bottomland forests, hydrology, geomorphology, plant succession 8994
- forest economics, forest policy 2771
- fungal diseases, *Armillaria cepistipes, Quercus petraea* 2267
- insect pests, *Coccinella septempunctata, Quercus,* ecology 9165
- *Pinus sylvestris,* provenance trials, IUFRO 831
- silviculture, conferences 4172
- street trees, air pollution, sulfur dioxide, salt injury 3644
- wildlife, forest management 4914

Hunting
- *Alces alces,* forest management, valuation, Canada 9219
- economics, deer, *Odocoileus hemionus,* forest management, USA 10065
- licenses, forest economics, USA 3528
- rain forests, monkeys, nature conservation, Latin America 5815
- tropical forests
  - Ecuador, small mammals 5814
  - forest management, Bolivia 5813
  - nature conservation, deforestation, Peru 5812
  - Peru, sustainability 5816
  - wildlife, sustainability, measurement 697

Hurricanes
- broadleaves, natural regeneration, Nicaragua 3438
- deciduous forests, forest ecology, natural regeneration, Madagascar 6268
- forest trees, natural regeneration, Jamaica 1891
- *Pinus,* USA, stems, damage 2900
- *Pinus radiata,* forest plantations, erosion, remote sensing, New Zealand 5200
- rain forests
  - forest litter, soil chemistry, Puerto Rico 6292
  - natural regeneration, Nicaragua 547

Hurricanes *cont.*
- tropical forests
  - natural regeneration, Guadeloupe 4796
  - Puerto Rico, damage 1892

Hyalophora cecropia, silkworms, carbon dioxide enrichment, *Betula papyrifera,* food plants 8683

Hyblaea puera, insect pests, *Tectona grandis,* entomogenous fungi, *Beauveria bassiana* 5710

Hybrids
- *Betula,* insect pests, Finland 7427
- breeding programmes
  - *Eucalyptus,* pulpwood production, intensive silviculture, South Africa 553
  - *Pinus,* pulpwood production, intensive silviculture, South Africa 553
- *Eucalyptus,* cold resistance, acclimatization, plant physiology, Portugal 1890
- *Eucalyptus tereticornis,* species trials, India 8565
- fungal diseases, *Melampsora, Salix,* resistance 5524
- identification, *Populus,* insect pests, USA 6594
- *Juglans,* inheritance, genetic markers 5529
- *Larix*
  - seed germination, seedling growth, USA 1432
  - seed orchards, Finland 3976
- *Larix decidua, Larix leptolepis,* genetics, Germany 3129
- *Leucaena,* seedling growth 7168
- *Leucaena leucocephala* × *Leucaena esculenta,* molecular genetics, identification, Mexico 2224
- *Nothofagus,* geographical distribution, genetic variation, adaptation, Chile 6386
- *Picea,* genetic variation, taxonomy 7361
- *Picea abies,* provenance trials, genetic variation, increment, Sweden 824
- *Pinus,* chloroplast genetics, taxonomy 9048
- *Pinus cembra,* genetic variation, Romania, growth 2186
- *Pinus pinaster,* heterosis, provenance trials, France, combining ability 9971
- polyploidy, forest trees, genetics, simulation 7338
- *Populus,* explants 9447
- *Populus angustifolia* × *Populus fremontii,* insect pests, *Chrysomela confluens,* ecology 5754
- *Populus canadensis,* genetic variation, chloroplast genetics 7372
- *Populus tremula,* species trials, genetic variation, Sweden 9416
- *Populus tremuloides,* species trials, genetic variation, Sweden 9416
- *Quercus,* foliage, trichomes, taxonomy 1215
- *Salix,* insect pests, resistance 5524
- *Salix babylonica,* foliage, chemotaxonomy, flavonoids 583
- *Sorbus,* population genetics, plant morphology, Switzerland 6596
- *Ulmus americana,* genetics, ploidy, disease resistance, USA 1456

Hydnum, mycorrhizas, *Picea abies,* identification, methodology 9081

Hydrology
- *Acacia mangium,* forest influences, watersheds, Sabah 2908-2909
- acid deposition, soil chemistry, Sweden, simulation 1905
- afforestation
  - erosion, Spain 9238
  - soil conservation, India 2401
- *Araucaria cunninghamii,* forest management, Australia 7547
- bottomland forests
  - forest management, Slovakia 5832
  - geomorphology, plant succession, Hungary 8994

- **Hydrology** *cont.*
  - coniferous forests
    - deforestation, Czech Republic 5831
    - watersheds, simulation, USA 4084
  - conifers
    - forest litter, decomposition, USA 7897
    - watersheds, UK, research 702
  - deciduous forests
    - transpiration, estimation, UK 3605
    - Venezuela 5287
  - deforestation 8418
  - economics, protection forests, Italy 703, 6699
  - *Eucalyptus,* logging, Australia, simulation 3336
  - *Eucalyptus camaldulensis,* water uptake, Australia 8809
  - *Eucalyptus globulus,* coppice, clear felling, Portugal 3687
  - *Fagus sylvatica,* precipitation, air pollution, UK 3670
  - forest influences
    - conferences 15
    - erosion, research, Thailand 358
    - precipitation, runoff, Japan, statistics 7550
    - watersheds
      - Brazil, research projects 9237
      - Finland 5836
      - Slovakia, simulation 5835
      - Sweden 5836
      - USA 3685
  - forest plantations, New Zealand 5833
  - forest recreation, Ukraine, damage 4976
  - forest trees
    - acid deposition, watersheds, Finland, acidification 6333
    - Australia 6370
  - forestry, clear felling, drainage, flooding, Sweden 4932
  - forests, climatic change, conferences 3305
  - land use, agroforestry, Indonesia 2397
  - *Picea sitchensis,* clear felling, UK 5830
  - *Pinus,* silvicultural systems, Cuba 4937
  - *Pinus radiata*
    - forest influences, watersheds, New Zealand 2910
    - forest plantations, watersheds, New Zealand 8375-8376
  - *Pinus* (Southern), geographical information systems, biomass production, USA 2506
  - *Pinus sylvestris,* watersheds, cycling, cations, Spain 8377
  - plant disorders, mountain forests, cycling, Sabah 3806
  - *Prosopis velutina,* riparian forests, simulation, USA 1531
  - rotations, valuation, mathematical models 3224
  - runoff, chemistry, methylmercury, Sweden 8795
  - soil water movement, slopes, Japan 8769
  - stream flow, vegetation types, climate, Philippines 5838
  - water quality, forestry, New Zealand 5834
  - watersheds, forest influences, streams, UK 2906
  - wetlands, forest management, USA 7546
- ***Hyeronima,*** choice of species, forestry development, South America 2551
- ***Hyeronima alchorneoides***
  - afforestation, pastures, Costa Rica, stem form, growth 5051
  - increment, diameter, Costa Rica, variation, climate 1841
  - soil chemistry, nitrogen, mineralization, Costa Rica 5247
  - species trials, Costa Rica 4262
  - understorey, plant competition, Costa Rica 6559
- ***Hyeronima laxiflora***
  - forest litter, decomposition, drought, Panama 1916
  - wood anatomy, wood properties 6428
- ***Hylastes opacus,*** insect pests, *Pinus,* USA 5746
- ***Hylesia nigricans,*** insect pests, Argentina 2301
- ***Hylobates hoolock,*** mixed forests, feeding behaviour 6687
- ***Hylobius abietis***
  - insect pests
    - conifers
      - behaviour 2347
      - shelterwood system, Sweden 4041
      - Sweden, control 10054
    - Czech Republic, monitoring 7477
    - forest trees, feeding behaviour 5759
    - France, disease vectors, fungal diseases 3186
    - *Picea sitchensis,* UK, damage 2353
    - *Pinus,* France, monitoring 5737
    - *Pinus sylvestris*
      - disease vectors 5757
      - forest plantations
        - Finland
          - models 10043
          - survival 10043
      - France, disease vectors, *Leptographium procerum* 3165
      - Sweden 3435
    - *Pseudotsuga menziesii,* France, control 2382
- ***Hylobius pales,*** insect pests, *Pinus strobus,* antifeedants 5736
- ***Hylobius radicis,*** insect pests, *Pinus sylvestris,* Canada, damage 7484
- ***Hylobius warreni,*** insect pests, conifers, Canada, reviews 7467
- ***Hymenaea courbaril***
  - foliage, flavanoids 9814
  - species trials, reclamation, mined land, Venezuela 6711
- ***Hymenocardia acida,*** medicinal plants, Zaire 7808
- ***Hymenolobium mesoamericanum,*** increment, diameter, Costa Rica, variation, climate 1841
- **Hymenoptera**
  - insect pests
    - *Betula,* air pollution, Russia 663
    - *Pinus,* air pollution, Russia 663
- ***Hymenostegia afzelii,*** foliage, photosynthesis, plant water relations, Cameroon 313
- ***Hyphaene thebaica,*** multipurpose trees, Africa, Arid Regions 8037
- ***Hypholoma fasciculare***
  - forest litter, deciduous forests, cycling, phosphorus, UK 9713
  - fungal diseases, *Fagus sylvatica,* temperature 4861
- **Hyphomycetes,** root nodules, *Alnus glutinosa* 8278
- ***Hypodermella sulcigena*** (*see Lophodermella sulcigena)*
- ***Hypolixus truncatulus,*** insect pests, *Acacia nilotica,* India 4042
- ***Hypoxylon mammatum,*** fungal diseases, *Populus tremuloides,* USA, disease vectors 10011
- ***Hypsipyla grandella***
  - insect pests
    - Argentina 2301
    - *Cedrela odorata*
      - Costa Rica, nutrient reserves, starch 6654
      - Cuba, damage 1483
    - *Swietenia macrophylla,* Cuba, damage 1483
    - *Swietenia mahagoni,* USA, chemical control 8351
    - *Toona ciliata,* resistance, plant composition 3742
- ***Hypsipyla robusta***
  - insect pests
    - *Swietenia macrophylla,* India, biological control 672
    - *Toona ciliata*
      - chemical control 5781
      - India, biological control 672
      - Pakistan, seeds 5679
- **Ice damage**
  - *Abies veitchii,* subalpine forests, Japan 9673
  - street trees, USA 8460
- **Iceland,** *Betula,* molecular genetics, mapping 9056
- **Icteridae,** birds, bamboos, USA, habitats, bird control 6677
- ***Idesia polycarpa,*** pioneer species, topography, plant morphology, Japan 8765
- ***Ilex,*** flora, checklists, Sabah 7248
- ***Ilex chinensis,*** forest litter, nitrogen fixation, Japan 1943
- ***Ilex crenata,*** mites, *Panonychus citri,* habit, Japan, population dynamics 667
- ***Ilex paraguariensis***
  - agroforestry, economics, Paraguay 1560
  - tissue culture, embryo culture, culture media, micropropagation 870
- ***Ilex vomitoria,*** dwarfism, seedlings, morphogenesis 6397
- ***Illicium,*** taxonomy, Malaysia 8133
- **Image processing**
  - computer analysis, *Fagus sylvatica,* bark, anatomy 6399
  - *Fagus sylvatica,* bark, anatomy, age of trees 6398
- **Immunology,** conifers, seeds, legumin 2969
- **Improvement fellings**
  - mechanization, *Betula,* Finland, economics 5161
  - *Pinus,* Canada 4421
  - *Pinus strobus,* Canada 4354
  - *Populus, Picea glauca,* Canada, growth 175
- **Improvement planting** (*see also* Underplanting)
  - canes and rattans, Indonesia 972
  - choice of species, Costa Rica 9423
  - *Dryobalanops,* Brunei Darussalam, spatial distribution, site factors 6926
  - economics, fruit trees, rain forests, Indonesia 4109
  - forest trees, biomass, Zaire, growth 6981
  - *Shorea,* secondary forests, Indonesia, methodology 7770
  - *Tectona grandis,* forest plantations, Indonesia 931
- **Increment** (*see also* Growth models)
  - *Abies alba,* geographical distribution, Poland 1009
  - *Abies balsamea,* thinning, soil water regimes, USA 1774
  - *Abies fraseri,* Christmas trees, genetic variation, USA 3125
  - *Abies procera,* provenance trials, climate, Canada 2549
  - *Acacia mangium,* forest plantations, Sabah 1748
  - *Acacia mearnsii,* provenance trials, China 9058
  - *Acacia nilotica,* forest plantations, lopping, India 1798
  - *Ailanthus excelsa,* nitrogen-phosphorus fertilizers, nutrient uptake, India 9468
  - *Alnus rubra,* thinning, USA 5150
  - basal area
    - *Abies,* dendrochronology, Germany, statistical analysis 793
    - *Abies lasiocarpa,* cones, climate, USA 2098
    - dendrochronology, growth rings, equations 7665
    - *Eucalyptus regnans,* foliage, soil chemistry, New Zealand 4394
    - maps, geographical information systems, botanical composition, Canada 4451
    - *Pinus palustris,* USA, simulation 2505
    - *Tsuga mertensiana,* cones, climate, USA 2098
  - *Betula papyrifera,* mixtures, Canada 4361
  - *Betula pendula*
    - planting stock, micropropagation, seedlings, Finland 7766
    - seed production, flowering 7727
    - spacing, Finland 9532
  - biomass, degraded forests, site types, amelioration of forest sites, Poland 4089
  - broadleaved evergreen forests
    - crown, stem form, South Africa 224

Increment *cont.*
- broadleaved evergreen forests *cont.*
  - plant competition, synecology, South Africa 223
- broadleaves
  - dendrochronology, synecology, USA 5914
  - irrigation, leachates, Canada 1753
  - light, soil water, USA 5181
  - topography, soil properties, USA 5235
- canes and rattans
  - *Calamus manan,* shade trees, Indonesia 1802
  - *Calamus subinermis,* stems, morphology, Sabah 7804
- *Chamaecyparis obtusa,* biomass, respiration, Japan 8707
- conifers
  - dendroclimatology, climate, USA 4990
  - forest decline, Austria, simulation 7202
  - plant competition, growth models, USA 7675
- *Cryptomeria japonica,* stand density, Japan 9536
- *Cupressus macrocarpa,* New Zealand 4403
- deciduous forests
  - acid deposition, USA, site factors 2693
  - drought, synecology, USA 3593
- diameter
  - *Alnus rubra,* provenance trials, France 836
  - *Brachylaena huillensis,* Kenya, age 998
  - broadleaves, Costa Rica, variation, climate 1841
  - *Cedrela odorata,* light, Peru, simulation 6167
  - conifers
    - air pollution, Russia 4569
    - climate, Russia 9592
    - Finland 9584
  - dendrometers, history 4387
  - *Eucalyptus delegatensis,* provenance trials, stem form, New Zealand 4258
  - *Eucalyptus globulus,* altitude, photosynthesis, India 9682
  - *Fagus,* deciduous forests, synecology, canopy 3906
  - growth models, forest inventories, data processing, Sweden 9599
  - height, growth models, *Eucalyptus deglupta,* Indonesia 1828
  - mixed forests, methodology 9343
  - *Picea abies*
    - heartwood, age of trees, Estonia 1183
    - sapwood, age of trees, Estonia 1183
    - Sweden, root and butt rots 8712
  - *Picea glauca,* wind damage, dendrochronology, Canada 3484
  - *Picea mariana,* wood properties, spacing, Canada 1182
  - *Pinus banksiana*
    - thinning, wood density, Canada 6364
    - tree breeding, statistical analysis, Canada 794
  - *Pinus ponderosa,* air pollution, ozone 4553
  - *Pinus rigida,* dendroclimatology, stand characteristics, USA 6763
  - *Pinus sylvestris,* pruning, Finland, simulation 3455
  - *Pinus taeda,* air pollution, ozone, water stress, USA 7199
  - *Pinus uncinata,* climate, France 7860
  - site factors, mangrove forests, natural regeneration, Bangladesh 6177
- distribution, *Pinus,* South Africa, simulation 4384
- *Dryobalanops sumatrensis,* silviculture, Peninsular Malaysia, plantations 2698

Increment *cont.*
- equations, *Picea abies,* height, Poland 6976
- estimation, forest inventories, sampling 6213
- *Eucalyptus*
  - early selection, genetic variation, isoenzymes 4839
  - fertilizers, Australia, insect pests 9138
  - forest plantations
    - mortality, drought, South Africa 7873
    - weed control, South Africa, simulation 7786
  - species trials, Australia 3477, 6190
- *Eucalyptus grandis*
  - site class assessment, equations, height, South Africa 7824
  - soil water, South Africa, simulation 7680
  - tree breeding, progeny testing, early selection, Colombia 2225
- *Eucalyptus tereticornis,* spacing, biomass production, energy relations, India 2657
- *Fagus sylvatica*
  - climate, Germany, simulation 1058
  - crown, forest decline, Switzerland, simulation 8944
  - dendroclimatology, Slovakia 10158
  - stand structure, Croatia 4404
  - thinning, Slovenia 5149
- *Faidherbia albida*
  - seedlings, plant morphology, Burkina Faso 6061
  - shoot cuttings, plant morphology, Burkina Faso 6061
- forest inventories, Switzerland 6220
- forest plantations, height, climate, Spain 1826
- forest trees 1007
  - air pollution, dendrochronology, Poland 7612
  - Canada, measurement, research 1643
  - dendrochronology, France 3290
  - fertilizers, Algeria 900
  - forest plantations, diameter, growth models, plant competition 9598
  - population dynamics, USA, equations 9962
  - simulation, USA 7676
  - volume, bark, Spain, equations 5961
- *Fraxinus excelsior,* plant competition, statistical analysis, Germany, mixtures 791
- fungal diseases
  - *Seiridium cardinale, Cupressus sempervirens,* Italy 9106
  - *Taphrina betulina, Betula pubescens,* witches' brooms, UK 5663
- *Gmelina arborea*
  - forest plantations, biomass production, Ghana 5174
  - site preparation, forest plantations, Ghana 5131
- *Grewia optiva*
  - defoliation, foliage, biomass production, India 6147
  - heritability, India, correlation analysis 9982
- growth models
  - *Acacia mangium,* Indonesia 1831
  - *Bombacopsis quinata*
    - Costa Rica 218
    - Panama 218
  - *Caesalpinia velutina,* Central America 220
  - *Casuarina cunninghamiana,* Central America 219
  - *Cunninghamia lanceolata,* China 6984
  - *Eucalyptus grandis,* soil water, water use efficiency, South Africa 9355
  - *Eucalyptus saligna*
    - Costa Rica 222
    - Guatemala 222
  - *Eucalyptus urophylla,* forest plantations, Indonesia 1833
  - forest trees, carbon balance, plant morphology, equations 9589

Increment *cont.*
- growth models *cont.*
  - *Gmelina arborea,* Central America 221
  - height
    - *Picea glauca,* stand characteristics, Canada 1838
    - *Pinus,* USA 5179
    - *Populus tremuloides,* stand characteristics, Canada 1838
  - mathematics 787
  - *Pinus ponderosa,* stand density, USA, statistical analysis 1840
  - *Pinus sylvestris,* drainage, Finland 5182
  - *Populus,* short rotation forestry, photosynthesis, USA 1619
- *Gymnocladus dioica,* forest nurseries, tree guards, USA 442
- height
  - *Alnus rubra,* provenance trials, France 836
  - *Calliandra calothyrsus,* species trials, biomass production, Western Samoa 1668
  - conifers
    - advance growth, USA 152
    - plant succession, seral stages, USA 4792
  - deciduous forests, stand characteristics, population dynamics, USA 9961
  - diameter, equations, *Populus,* Argentina 790
  - *Fagus sylvatica,* Switzerland, site factors 6967
  - forest trees
    - simulation 228
    - site class assessment, equations 1616
    - understorey, USA 3963
  - *Gliricidia sepium,* species trials, biomass production, Western Samoa 1668
  - growth models
    - forest trees
      - Germany 6185
      - site class assessment, Canada 4417
    - site factors 9366
  - *Picea abies,* clones, genotype mixtures, Sweden 1422
  - *Picea glauca,* canopy, light penetration, Canada 1757
  - *Picea mariana*
    - genetic variation, Canada 6589
    - site class assessment, Canada, equations 1616
    - tree breeding, early selection, Canada 9042
  - *Picea rubens,* liming, USA 3879
  - *Pinus,* site preparation, stand establishment, Sweden 9504
  - *Pinus banksiana,* tree breeding, statistical analysis, Canada 794
  - *Pinus cembra,* temperature, Austria 2799
  - *Pinus echinata,* site class assessment, USA 5178
  - *Pinus pinaster,* genetic variation, Portugal 7352
  - *Pinus rigida,* progeny testing, USA 4832
  - *Pinus sylvestris,* Russia, stand density 4410
  - *Pseudotsuga menziesii*
    - site class assessment, Italy 6181
    - tree breeding, genetic gain, Canada 3135
  - *Sesbania grandiflora,* species trials, biomass production, Western Samoa 1668
  - site class assessment, statistical analysis 2706
  - tundra, USA, spatial variation 7822
  - variation, *Picea abies,* tree breeding, early selection, plant physiology 1423
- *Larix leptolepis,* mixtures, Germany 9593
- mangroves, *Rhizophora apiculata,* spacing, Indonesia 1776

Increment *cont.*
- mixed forests
  - recruitment, mortality, Poland 2163
  - stand structure, Belgium, forest management 6941
- multipurpose trees, agroforestry, India 4110
- *Nauclea diderrichii*, spacing, stem form, Cameroon 3458
- *Nothofagus*, forest plantations, natural regeneration, Chile 6184
- photosynthesis, carbon dioxide, books 3297
- *Phyllanthus emblica*, forest plantations, fruiting, India 1743
- *Picea*, spacing, Canada, juvenile wood 2899
- *Picea abies*
  - climate, Germany 7818
  - forest plantations, beating up, plant morphology, Sweden 9529
  - global warming, provenance trials, Finland 2791
  - irrigation, Denmark 6930
  - mixtures, Finland, simulation 3462
  - NPK fertilizers, Denmark 7755
  - plant nutrition, plant water relations, Denmark 7819
  - provenance trials
    - diameter, drought, Poland 830
    - frost injury, Norway 9413
    - hybrids, genetic variation, Sweden 824
  - selection system, stand development, Norway 9489
  - shoot cuttings, habit, Finland 866
  - spacing, Sweden 3457
  - tree breeding, early selection, phenology 3132
- *Picea mariana*
  - Canada, Arctic regions 1827
  - gas exchange, carbon pathways, genetic variation, Canada 9041
  - NPK fertilizers, spacing, Canada 1714
  - stem form, treelines, Canada 2688
- *Picea rubens*, frost injury, USA 9677
- *Picea sitchensis*, stem form, mortality, UK 9576
- *Pinus*
  - short rotation forestry, USA 2703
  - thinning, USA 4355
- *Pinus banksiana*, mixtures, Canada 4361
- *Pinus contorta*
  - injuries, oleoresins, USA 7206
  - nitrogen fertilizers, plant nutrition, Canada 9462
- *Pinus eldarica*
  - planting stock
    - explants, USA 1688
    - seedlings, USA 1688
- *Pinus kesiya*
  - spacing, thinning, Zimbabwe 6942
  - thinning, Madagascar, wood properties 8858
- *Pinus maestrensis*, spacing, stand development, Cuba 950
- *Pinus pinaster*
  - tree breeding
    - genetic gain, France 3977
    - progeny testing, heritability, France 5496
- *Pinus pseudostrobus*, Mexico 6982
- *Pinus radiata*
  - genetic variation, stem form, fungal diseases, New Zealand 4818, 4821
  - nitrogen fertilizers, genetic variation, Australia 7752
  - phenology 5176
  - provenance trials, stem form, Chile 6027
  - site preparation, slash, Australia 6119
- *Pinus resinosa*, crown, development, spacing, Canada 1225-1226
- *Pinus sylvestris*
  - air pollution, amenity and recreation areas, Belarus 6326
  - defoliation, branches, foliage, Finland 8892
  - fallout, Ukraine 4548

Increment *cont.*
- *Pinus sylvestris cont.*
  - fertilizers, plant composition, peatlands, Finland 6068
  - forest plantations, beating up, plant morphology, Sweden 9529
  - frost injury, phenology, climatic change, simulation 7040
  - global warming, provenance trials, Finland 2791
  - groundwater, Germany 4524
  - mixtures, Finland, simulation 3462
  - natural regeneration, artificial regeneration, wood properties, Sweden 7120
  - peatlands, plant nutrition, Sweden 9934
  - potassium fertilizers, plant nutrition, Finland 129
  - provenance trials
    - air pollution, Poland 6030
    - experimental design, plant competition, Sweden 9415
  - spacing, stem form, Finland 6937
  - urea, thinning, Sweden 3487
- *Pinus taeda*
  - selection system, USA 3480
  - stand development, simulation, USA 2707
  - thinning, mechanization 3452
- *Pinus thunbergii*
  - diameter, Japan 6973
  - height, Japan 6973
- *Populus*
  - forest plantations, Poland 936
  - genetic variation, plant morphology 5551
- *Populus alba* × *Populus* 'Crandon', genetic transformation, herbicide resistance, glyphosate, photosynthesis 6605
- *Populus canadensis*, forest plantations, biomass production, forest litter, Pakistan 9591
- *Populus tremuloides*, mixtures, Canada 4361
- *Prosopis glandulosa*, plant competition, grasses, USA 9013
- *Prosopis juliflora*, variety trials, plant morphology, India 1662
- *Prunus avium*, silviculture, Germany 6137
- *Pseudotsuga macrocarpa*, ozone, drought, USA 7107
- *Pseudotsuga menziesii*
  - dendroclimatology, USA 10161
  - forest plantations, USA, forest borders 3483
  - nitrogen fertilizers, soil chemistry, USA 3418
  - site class assessment, France 9543
  - thinning, Germany 9523
  - transpiration, simulation, Canada 3000
  - USA, plant competition, *Acer macrophyllum* 5140
- *Quercus*, forest plantations, pseudogleys, Slovenia 2695
- *Quercus ilex*, thinning, Spain 2653
- *Quercus suber*, biomass, cork, forest litter, Spain 1825
- remote sensing, forest inventories, Sweden 7008
- reserved forests, nature conservation, sample plot technique, Zimbabwe 6816
- *Salix viminalis*, genetic variation, genotype environment interaction, plant nutrition, soil types 4838
- savanna woodlands, coppice, Burkina Faso 6095
- *Sequoia sempervirens*
  - respiration 3014
  - thinning, USA 4357
- *Shorea*, silviculture, Peninsular Malaysia, plantations 2698
- site class assessment, theory 4409
- site factors
  - *Gmelina arborea*, Indonesia 1789
  - *Pinus uncinata*, France 6968
- soil water, simulation 7680

Increment *cont.*
- *Taxodium distichum*
  - flooding, hypoxia, roots 1120
  - soil water regimes, USA, road construction 7063
- *Taxus brevifolia*, bark, damage, USA 1005
- *Tectona grandis*
  - forest plantations
    - forest economics, Indonesia 6188
    - phosphorus fertilizers, Venezuela 4307
- *Thuja occidentalis*, plant physiology, Canada 8699
- *Tilia cordata*, plant competition, statistical analysis, Germany, mixtures 791
- traits, *Eucalyptus globulus*, provenance, identification, Australia 7724
- *Triplochiton scleroxylon*
  - forest plantations
    - forest borders
      - Cameroon 4594
        - equations 5013
- tropical forests, logging, Brazil, regrowth 6180
- variation
  - equations, *Pinus sylvestris*, thinning, selection criteria, Germany 999
  - *Faidherbia albida*, soil fertility, agroforestry, Niger 3275
  - forest trees, Germany 6982
  - *Juniperus flaccida*, Mexico, mixed forests 226
  - *Pinus pseudostrobus*, Mexico, mixed forests 226
  - *Pinus taeda*, stand density, stand characteristics, USA 947
  - site factors, *Quercus petraea*, Germany 997
- volume
  - *Eucalyptus*, site class assessment, soil types, Uruguay 1003
  - forest inventories, Germany 1000
  - *Picea abies*, NPK fertilizers, irrigation, Denmark 911
  - *Pinus*
    - plant nutrition, Sweden 6182
    - site class assessment, soil types, Uruguay 1003
  - *Pinus contorta*, NPK fertilizers, irrigation, Denmark 911
  - *Pinus palustris*, heritability 8217
  - *Populus*, stem form, Australia 7716
  - simulation, sampling 8506

Increment boring
- equipment 2485
- techniques, *Nothofagus*, Chile, secondary forests 6168

Indarbela quadrinotata, insect pests, *Paraserianthes falcataria*, Bangladesh, chemical control 6666

India
- *Acacia nilotica*, foliage, chemistry, genetic variation, provenance 3141
- afforestation, marginal land, reclamation, silviculture, books 4
- aggregates, soil biology, microorganisms, forest influences 8803
- agroforestry 2417
  - books 7, 750, 8474
  - reclamation, waste land, conferences 767
- *Albizia procera*, seed germination, irrigation, distillery effluent 6879
- *Azadirachta indica*
  - shoot cuttings 98
  - tissue culture, embryo culture, culture media, micropropagation 2605
- bamboos
  - *Bambusa arundinacea*, taxonomy, nomenclature 3854
  - *Bambusa tulda*, vegetative propagation 101
  - *Himalayacalamus hookerianus*, taxonomy, utilization 8453
- *Bauhinia variegata*, forest nurseries, plant nutrition, nitrogen, phosphorus 8597
- biodiversity
  - forest management 4975

India *cont.*
- biodiversity *cont.*
  - nature conservation
    - management, wildlife conservation 5894
    - sustainability, forestry 4974
- broadleaves, multipurpose trees, fibre plants 2678
- *Casuarina,* agroforestry 3272
- *Casuarina equisetifolia,* shoot cuttings 103, 3400
- *Casuarina glauca,* shoot cuttings 3400
- *Cedrus deodara,* books 2454
- community forestry, development projects, non-governmental organizations, conferences 774
- *Coriaria nepalensis,* shoot cuttings, erosion control 95
- *Cycas,* taxonomy 5432
- *Dalbergia,* tree breeding 3140
- *Dalbergia sissoo*
  - progeny testing, seeds, quality 9064
  - shoot cuttings 6060
- *Debregeasia hypoleuca,* shoot cuttings, erosion control 95
- deforestation, forests, conservation 4106
- degraded forests, reclamation, planning 8388
- drought, forest influences, deforestation 7869
- environmental management, sustainability, mountain areas, books 2453
- ethnobotany 191
  - books 747
- *Eucalyptus,* biomass, estimation, volume determination, equations 8503
- *Eucalyptus tereticornis,* farm forestry 1549
- Fabaceae
  - bark, medicinal plants, ethnobotany 4373
  - reviews 7143
- *Ficus religiosa,* foliage, fodder, plant composition, nutritive value 8676
- flora, biodiversity, nature conservation 7601
- Focus on biodiversity I 4338, 4811, 4968-4972, 4974-4975
- Focus on biodiversity II 5894, 5897
- Focus on sustainable development 5030-5031, 5044, 5189-5191, 5211, 5224
- forest economics, cost benefit analysis, discount rates, estimation, development projects 5211
- forest influences
  - air pollution, ozone 9760
  - atmosphere, precipitation, simulation 9759
- forest management
  - conservation, legislation, tribal society, right of access 5993
  - participation
    - community forestry 3495, 6200
      - research, requirements 3357
      - training 3358
    - sociology, culture 7696
    - sustainability, community forestry 3348
  - sustainability
    - community forestry 7834
    - information needs, site class assessment, growth models 5189
    - tropical forests, indigenous knowledge 2724
  - women, development projects 1631
- forest policy
  - forest management
    - forest economics 47
    - multiple use, gender relations 4238
  - forestry development, forest products industries, degraded forests 2521
  - social forestry 5036
- forest resources
  - mapping, forest management 3523
  - sustainability, utilization, conferences 20

India *cont.*
- forest trees
  - air pollution, control, reviews 3668
  - fuel plantations 2540
  - vegetative propagation
    - research 93
    - reviews 93, 97
- forestry
  - books 7, 4154
  - conservation, legislation 1637
  - environment, development 5984
  - history 7695
    - books 4155
  - legislation 819
  - research, education, conferences, books 7624
  - sociology, conflict, books 1
  - sustainability, research, organizations 5044
  - training 9404
- forestry development
  - environment, conferences 6806
  - forest management, sustainability 5030
  - investment, World Bank 51
- forests
  - carbon cycle 2788
  - remote sensing, image interpretation, shifting cultivation 2757
  - sample plot technique, nature conservation 4972
- fuelwood
  - resources
    - rural development
      - social forestry
        - books 7628
        - constraints 7628
- fungal diseases, *Daedaleopsis flavida,* broadleaves, tropical forests 6627
- *Grewia optiva,* defoliation, foliage, biomass production, increment 6147
- information services 8548
- insect pests
  - *Dioryctria abietella,* conifers, biology 5730
  - ecology, control, books 5
  - *Myllocerus undecimpustulatus, Terminalia,* chemical control 6668
  - *Prociphilus himalayensis, Pinus wallichiana,* biology 2313
  - reviews, damage, control 6646
- Joint forest management 3348, 3357-3358, 3495-3499, 4092, 4099-4100, 4108, 4120-4123
- *Leucaena,* gums, exudates, chemistry, provenance 2979
- mangrove forests, biodiversity, nature conservation 4971
- mangroves
  - *Duabanga,* geographical distribution, coastal areas 2120
  - *Sonneratia,* geographical distribution, coastal areas 2120
- medicinal plants
  - antiviral properties 6953
  - ethnobotany 6152
- multipurpose trees
  - afforestation, waste land, soil organic matter, carbon cycle 7561
  - agroforestry
    - conferences 2463
    - reclamation, waste land, books 6773
  - minor forest products, social forestry, conferences 14
  - reclamation, waste land, soil water, infiltration 8397
  - seeds, storage, seed germination, reclamation 79
  - shoot cuttings 105
- *Pinus*
  - biomass, estimation, volume determination, equations 8503
  - exotics, species trials, minor forest products, reviews 6870
- *Pinus roxburghii*
  - books 751
  - shoot cuttings 99
- plant parasitic nematodes, *Paralongidorus sali, Shorea robusta,* damage 5779

India *cont.*
- pollen, rain forests 3293
- *Populus,* clones, species trials, breeding programmes 577
- *Prosopis cineraria,* provenance, foliage, chemistry 9050
- reclamation
  - afforestation, saline soils, techniques 8387
  - degraded land, ecology, sociology 3236
  - waste land, agroforestry, farm forestry, fuel plantations 7558
- root nodules, *Rhizobium,* nitrogen fixing trees, arid soils 2234
- rural development, non-wood forest products, cottage industry 6141
- shifting cultivation, soil fungi, mycorrhizal fungi 8436
- soil degradation, hill land, shifting cultivation, deforestation, land use 10087
- *Syzygium cumini,* shoot cuttings 1690
- *Tamarix aphylla,* shoot cuttings 3400
- *Tectona grandis*
  - genetic improvement 3991
  - vegetative propagation, reviews 100
- *Tephrosia,* stomata, taxonomy 5428
- *Terminalia,* tree breeding, phenotypic selection 6601
- trade, international trade, international agreements, intellectual property rights, biodiversity 9389
- tree breeding, biotechnology 7336
- tropical forests, forest management, history, ecology 5031
- urban forestry 4135
  - bibliographies, books 6775
- vegetation, atmosphere, precipitation, simulation 9759
- waste land, reclamation, forestry development, participation 4092
- wildlife
  - nature conservation 6673
    - forestry 7511
- *Woodfordia fruticosa,* shoot cuttings, erosion control 95
- woody plants, oilseed plants, choice of species, land development 1657
- Andaman and Nicobar Islands
  - *Bruguiera gymnorrhiza,* forest litter, measurement, mangrove forests 297
  - *Crudia balachandrae,* taxonomy, new species 8968
  - *Cryptocarya caesia,* endangered species 9896
  - *Dehaasia firma,* geographical distribution 505
  - *Mitragyna rotundifolia,* flora 7253
  - rain forests
    - deforestation, soil acidity 5865
    - shelterwood system, light 8619
  - *Siphonodon celastrineus,* taxonomy 2116
  - *Uncaria,* flora 7253
  - wood anatomy, secondary timbers 4673
- Andhra Pradesh
  - broadleaves
    - energy value, seasonal variation 2541
    - foliage, plant water relations, biomass production 8821
  - *Couroupita guianensis,* flowers, biology 9867
  - ethnobotany, veterinary medicine 6151
  - Fabaceae, flora 7251
  - *Faidherbia albida,* vegetative propagation, layering, shoot cuttings 8586
  - farm forestry 4099
  - forest fires, soil properties 6379
  - forest management, planning, community forestry 3496
  - forests, biodiversity, nature conservation, afforestation 4969
  - fungal diseases, *Cylindrocladium scoparium, Pterocarpus santalinus,* foliage 610

- **India** *cont.*
  - Andhra Pradesh *cont.*
    - mangrove forests, synecology 523
    - mangroves, *Avicennia*, shoot cuttings 102
    - medicinal plants, ethnobotany 7806
    - multipurpose trees, spacing, biomass production 1779
    - Rubiaceae, flora 7250
    - *Sterculia urens*, shoot cuttings 104
    - watershed management, development projects, fodder, production 2396
    - watersheds, development projects, erosion control, water conservation 2394
  - Arid Regions, broadleaves, fuelwood, calorific value 3361
  - Arunachal Pradesh
    - bamboos
      - *Bambusa pallida*, tree breeding, genetic variation 1433
      - *Neomicrocalamus mannii*, endangered species 733
  - Assam
    - bamboos, *Bambusa burmanica* 515
    - broadleaves, forest litter, decomposition 1917
    - *Cinnamomum sulphuratum*, endangered species, geographical distribution 8959
    - *Grewia optiva*, seedling growth, species trials 63
    - *Paulownia*, height, increment 156
    - *Populus* 'G-3', shoot cuttings, species trials 63
  - Bihar
    - *Acacia sieberiana*, species trials 832
    - agroforestry, erosion control 2416
    - insect pests, *Apoderus tranquebaricus*, *Terminalia arjuna*, damage 650
    - minor forest products, collection, rural economy, tribes 8672
    - multipurpose trees, species trials 1664
    - *Nyctanthes arbor-tristis*, medicinal plants, ethnobotany 8687
    - *Shorea robusta*, degraded forests, stand structure, synecology 213
    - social forestry, development projects 8437
    - *Terminalia arjuna*, genetic variation, selection criteria 580
  - Chandigarh
    - *Eucalyptus tereticornis*, fuel plantations, water conservation, water use 699
    - *Leucaena leucocephala*
      - agroforestry
        - economics 727
        - soil conservation, water conservation 5875
  - Delhi
    - *Eucalyptus tereticornis*
      - spacing
        - biomass production
          - energy relations 2657
          - increment 2657
    - forest resources, deforestation, surveys, remote sensing 1551
  - Goa, Daman and Diu
    - *Acacia auriculiformis*, reclamation, mine spoil, lateritic soils 10092
    - insect pests, *Pteroma plagiophleps*, *Rhizophora mucronata* 9150
    - mangrove forests, reclamation 9251
  - Gujarat
    - broadleaves
      - air pollution, foliage, damage 5328
      - drought, mortality 2844
    - deer, *Cervus unicolor*, broadleaves, drought, damage 2844
    - forest management, sustainability 1014
    - fuelwood, consumption 8555
  - Haryana
    - *Acacia nilotica*
      - allelopathy, agroforestry 7316
      - forest plantations, lopping, increment 1798

- **India** *cont.*
  - Haryana *cont.*
    - *Acacia nilotica cont.*
      - provenance trials, genetic variation 9414
    - agroforestry, development projects, extension 4108
    - bamboos, *Bambusa tulda*, planting season, irrigation 2673
    - broadleaves
      - forest litter 3582
      - forest plantations, roots, distribution 2952
    - *Dalbergia sissoo*
      - coppice, growth 1737
      - forest plantations, forest influences, soil properties 1993
      - shelterbelts, crops 10107
    - degraded forests, reclamation, development projects 9243
    - multipurpose trees
      - agroforestry 10107
      - branching, habit 2037
      - fuel plantations
        - diameter, equations 1615
        - height, equations 1615
      - shelterbelts, species trials, soil properties 3689
      - species trials, fuelwood 1661
    - *Pinus roxburghii*, eroded soils, nitrogen-phosphorus fertilizers, mulching 130
    - *Populus* 'G-3', spacing, roots, distribution 2658
    - *Prosopis cineraria*, seed germination, planting, soil properties 4336
    - *Prosopis juliflora*, reclamation, saline soils, agroforestry 8389
    - reclamation, common lands, development projects, afforestation 7559
    - social forestry, development projects 4120
    - sodic soils, classification, distribution 302
  - Himachal Pradesh
    - *Abies pindrow*
      - diameter, cones, seeds 3388
      - silvicultural systems, site class assessment, soil chemistry 2815
    - *Azadirachta indica*, throughfall, stemflow, interception 706
    - *Celtis australis*, seed weight, seedling growth, nitrogen fertilizers 141
    - *Eucalyptus*, shelterbelts, crops 710, 9281
    - fodder plants, genetic resources 3050
    - forestry development, ecology, land use 1629
    - forests
      - rural economy 9554
      - synecology, stand structure, natural regeneration 2167
    - fungal diseases
      - *Fusarium*, *Robinia pseudoacacia* 2255
      - *Ophiostoma*, *Ulmus wallichiana* 5634
      - *Ophiostoma himal-ulmi*, new species, *Ulmus wallichiana* 8295
      - *Pistacia integerrima*, foliage 3168
    - *Grevillea*, shelterbelts, crops 710
    - *Grewia optiva*, increment, heritability, correlation analysis 9982
    - insect pests
      - *Diorhabda lusca*, *Celtis australis*, damage 1488
      - *Gibberifera simplana* subsp. *glaciata*, *Populus ciliata*, control 3192
    - *Leucaena*, shelterbelts, crops 710
    - *Leucaena leucocephala*
      - shelterbelts, crops 9281
      - variety trials 1652
    - mixed forests, synecology, topography 7269
    - multipurpose trees, biomass production, equations 789

- **India** *cont.*
  - Himachal Pradesh *cont.*
    - *Picea smithiana*
      - diameter, cones, seeds 3388
      - silvicultural systems, site class assessment, soil chemistry 2815
    - *Pinus roxburghii*
      - forest management 2719
        - planning, sustainability 1010
      - nitrogen-phosphorus fertilizers, soil properties 882
    - *Populus deltoides*, variety trials 1655
    - *Quercus*, foliage, tannins 1244
    - *Quercus leucotrichophora*, throughfall, stemflow, interception 706
    - *Rhododendron arboreum*
      - precipitation, canopy, cycling 10085
      - throughfall, stemflow, interception 706
    - *Robinia pseudoacacia*
      - forest nurseries, plant nutrition 6089
      - forest plantations, biomass production, distribution 1837
    - soil water, equations, climatic zones 1088
    - *Terminalia*, seed collection, seed treatment, seedling growth 2572
  - Indian Punjab
    - *Eucalyptus tereticornis*
      - forest plantations, soil amendments, soil types 883
      - hybrids, species trials 8565
    - flora 8982
    - multipurpose trees, reclamation, degraded forests 9249
    - sodic soils, classification, distribution 302
  - Jammu and Kashmir
    - *Acacia auriculiformis*, provenance trials, forest nurseries 1669
    - *Albizia lebbeck*, coppice, biomass production 8620
    - fodder plants, genetic resources 3050
    - *Pinus wallichiana*, forest influences, atmosphere, terpenoids 266
    - plant succession, riparian forests, mountains 3949
    - *Populus ciliata*, shoot cuttings 106
    - *Populus deltoides*
      - shoot cuttings 106
      - variety trials 2557
  - Karnataka
    - *Acacia auriculiformis*, provenance trials 1672
    - *Acacia tortilis*, interplanting, *Prosopis cineraria*, growth 2161
    - *Albizia lebbeck*, seed collection, seed treatment, seed germination 1680
    - *Azadirachta indica*, interplanting, *Prosopis cineraria*, growth 2161
    - bamboos, *Bambusa arundinacea*, biomass production, plantations 1804
    - *Bambusa bambos*, plantations, forest litter, nutrients 9704
    - broadleaved evergreen forests, ecotones, carbon cycle, soil organic matter 1361
    - *Casuarina equisetifolia*, planting stock, seedlings, NPK fertilizers 1721
    - degraded forests, species trials, reclamation, plant succession 6704
    - *Erythrina suberosa*, seed development, position effect 2944
    - *Eucalyptus*
      - plant physiology 3784
      - volume determination, equations 9579
    - *Eucalyptus brassiana*, provenance trials 1663
    - *Eucalyptus camaldulensis*, provenance trials 3370
    - *Eucalyptus tereticornis*, wood properties, air pollution 1987
    - farm forestry 4100

- **India** *cont.*
  - Karnataka *cont.*
    - *Ficus,* shoot cuttings 1689
    - fodder, supply balance, surveys 8678
    - forestry development, planning, management, development projects 9393
    - fungal diseases
      - *Phoma herbarum, Ixora singaporensis,* new host records 9115
      - *Phyllactinia dalbergiae, Dalbergia sissoo* 2281
    - insect pests
      - *Amata passalis, Santalum album,* parasitoids 641
      - *Caryedon serratus, Tamarindus indica,* biology 2341
      - *Cossus cadambae*
        - *Tectona grandis*
          - biology 2317
          - damage 2317
      - surveys
        - *Paraserianthes falcataria*
          - forest nurseries 2300
          - forest plantations 2300
    - *Leucaena leucocephala,* agroforestry, contour ridging 2421
    - *Morus alba*
      - phosphorus fertilizers
        - foliage
          - mycorrhizas 7802
          - silkworms 7802
    - *Morus australis,* nutrient uptake, weed control 8642
    - *Morus nigra,* nitrogen fertilizers, foliage, biomass production 7801
    - multipurpose trees
      - agroforestry, range management, research 10114
      - species trials 1673
    - mycorrhizas, *Glomus, Casuarina equisetifolia,* forest plantations, age 6617
    - *Peltophorum pterocarpum,* seed collection, seed treatment, seed germination 1680
    - reclamation
      - eroded soils, site class assessment, choice of species 6705
      - mine spoil, soil conservation, water conservation 713
    - *Salix tetrasperma,* shoot cuttings 1689
    - *Santalum album*
      - gibberellins, flowering, induction 2099
      - planting stock, stumps, NPK fertilizers 1721
      - seed weight, seed germination 1679
    - savannas, ecotones, carbon cycle, soil organic matter 1361
    - *Sesbania sesban,* fodder, production 9559
    - squirrels, *Ratufa indica, Ficus,* food plants 1514
    - *Tamarindus indica,* seed collection, seed treatment, seed germination 1680
    - *Tectona grandis,* planting stock, seedlings, NPK fertilizers 1721
    - watershed management, reclamation, soil conservation, water conservation 2395
    - wildlife, conservation, ecology, management 1513
  - Kerala
    - bamboos, seeds, storage 977
    - *Eucalyptus grandis,* afforestation, grasslands, NPK fertilizers 3421
    - *Eucalyptus tereticornis,* agroforestry, fungal diseases 7402
    - *Ficus hispida,* pollination, beneficial insects, coevolution 8956
    - fungal diseases
      - *Calonectria quinqueseptata*
        - *Eucalyptus tereticornis*
          - agroforestry 7402
          - climatic factors 7402

- **India** *cont.*
  - Kerala *cont.*
    - insect pests
      - *Cossus cadambae, Tectona grandis* 2332
      - *Heteropsylla cubana*
        - *Leucaena*
          - resistance 629
          - species trials 629
      - surveys
        - *Paraserianthes falcataria*
          - forest nurseries 2300
          - forest plantations 2300
    - *Lagerstroemia speciosa,* progeny testing, genetic variation 9057
    - mangrove forests, forest recreation, nature conservation 3282
    - *Paraserianthes falcataria*
      - forest litter, decomposition, fungi 2822
      - forest plantations, soil properties, factor analysis 9686
    - squirrels, *Ratufa macroura,* nature reserves, riparian forests 695
    - *Tectona grandis*
      - forest litter, decomposition, fungi 2822
      - forest plantations 8628
      - increment, forest plantations, weed control 161
      - thinning, management, stand density 8654
    - tropical forests
      - canopy gaps, ground vegetation, cycling 4785
      - soil chemistry 6279
    - *Xylia xylocarpa,* seeds, chemistry, edible species 6946
  - Madhya Pradesh
    - *Acacia,* species trials, provenance trials, seed germination 8564
    - afforestation, slopes, measurement, instruments 1791
    - *Albizia procera*
      - forest nurseries
        - mulches, irrigation 4313-4314
        - nitrogen fertilizers, plant growth regulators 9474
    - *Bambusa vulgaris,* shoot cuttings 871
    - *Cassia siamea*
      - planting, nitrogen-phosphorus fertilizers, soil degradation 8627
      - seed production, seed germination 4268
    - *Casuarina equisetifolia*
      - forest plantations, nitrogen cycle 4531
      - nitrogen fixation, soil water 3154
    - *Dalbergia sissoo*
      - provenance trials 1651
      - seed germination, seedling growth 840
      - seeds, colour, seed germination 847
      - shoot cuttings 9443
    - deciduous forests, synecology, remote sensing 9638
    - degraded forests, rehabilitation, forest management, community forestry 4121
    - edible species, ethnobotany 986
    - ethnobotany, edible species, medicinal plants 984
    - *Eucalyptus tereticornis,* coppice, growth 1734
    - forest management
      - participation
        - community forestry 6197
          - project appraisal 6198
    - forest trees
      - fuel plantations, choice of species 58
      - medicinal plants, ethnobotany, surveys 198
      - urban forestry, air pollution, tolerance 2875
    - fungal diseases, *Cochliobolus lunatus, Acacia nilotica,* forest nurseries 9085

- **India** *cont.*
  - Madhya Pradesh *cont.*
    - insect pests
      - *Ascotis imparata, Pongamia pinnata* 10041
      - *Atteva fabriciella, Ailanthus,* natural enemies 1485
      - *Chrysocoris purpureus, Populus deltoides,* forest nurseries 7433
      - *Hypolixus truncatulus, Acacia nilotica* 4042
      - *Spodoptera litura, Jatropha curcas,* biology 640
    - *Lagerstroemia parviflora,* cuttings 1718
    - *Leucaena leucocephala,* seed production, seed germination 4268
    - *Madhuca longifolia*
      - flowering, fruiting, medicinal plants 988
      - reclamation
        - waste land
          - irrigation 1539
          - planting 1539
    - medicinal plants, ethnobotany 985, 6155
    - *Melia azedarach,* forest nurseries, sowing depth 904
    - multipurpose trees
      - reclamation, mined land, economics 3248
      - seed germination, seed treatment 858
      - species trials, reclamation, mine spoil 2404, 4949
    - non-wood forest products, collection, rural economy 6156
    - *Phyllanthus emblica*
      - forest nurseries, sowing depth 904
      - forest plantations, increment, fruiting 1743
    - *Pithecellobium dulce,* silviculture 956
    - *Pongamia pinnata,* shoot cuttings 872
    - reclamation, techniques, degraded land 6706
    - *Schleichera oleosa,* silviculture 958
    - *Schleichera trijuga,* silviculture 958
    - *Shorea robusta,* forests, medicinal plants, collection 6154
    - *Tectona grandis*
      - diameter, fruits, seed germination 846
      - forest economics, forest management, planning 2786
      - grafting, seed orchards, establishment 6043
      - provenance trials 6019
      - seed germination, storage, provenance 6036
      - seed orchards, agroforestry, weed control 1554
      - seedling growth, genetic improvement 6593
    - tree breeding, tissue culture 6044
  - Maharashtra
    - broadleaves, forest nurseries, fertilizers, sewage 6905
    - *Eucalyptus tereticornis,* agroforestry, fuelwood 6726
    - forest management, participation, planning, community forestry 3499
    - forest plantations
      - forest influences, soil chemistry, lateritic soils 8023
      - models, biodiversity, conservation 4338
      - protection, trenching, cattle 681
    - forest resources, forest management, tribal society 7698
    - fungal diseases, *Fusarium pallidoroseum, Moringa oleifera* 8303
    - *Leucaena leucocephala*
      - agroforestry 7582
        - fuelwood 6726
    - mangrove forests, remote sensing, synecology 6996
    - medicinal plants, ethnobotany 202

- **India** *cont.*
  - Maharashtra *cont.*
    - parasitic plants, *Santalum album,* silviculture, host parasite relationships 186
    - squirrels, *Ratufa indica, Ficus,* food plants 1514
    - stand structure, development, forest management, working plans 5191
  - Manipur
    - Dipterocarpaceae, savanna woodlands 1385
    - nature conservation, national parks 734
    - synecology, species diversity, nature conservation, valleys 3084
  - Meghalaya
    - bamboos
      - *Dendrocalamus hamiltonii,* natural regeneration, shifting cultivation 8426
      - *Neomicrocalamus mannii,* endangered species 733
  - Mizoram, bamboos, silviculture, management 9561
  - Nagaland
    - bamboos, *Sinarundinaria nagalandiana,* taxonomy, new species, plant morphology 7219
    - nature conservation, national parks 734
    - synecology, species diversity, nature conservation, valleys 3084
  - Orissa
    - *Albizia procera,* reclamation, mine spoil, fertilizers 9250
    - *Casuarina equisetifolia,* social forestry, forest economics 10119
    - community forestry, forest policy 1630
    - forest management
      - participation, community forestry 3498
      - women, indigenous knowledge, minor forest products 6846
    - insect pests, Isoptera, *Eucalyptus tereticornis* 10035
    - mangroves, *Heritiera,* chromosomes 8235
    - medicinal plants, ethnobotany, surveys 199
    - multipurpose trees, reclamation, mined land, species trials 3246
    - *Nyctanthes arbor-tristis,* medicinal plants, ethnobotany 8687
    - shifting cultivation, sustainability, control 726
  - Pondicherry, broadleaved evergreen forests, roots, biomass, dynamics 3712
  - Rajasthan
    - *Acacia tortilis,* agroforestry 3274
    - afforestation, soil conservation, hydrology 2401
    - *Ailanthus excelsa*
      - forest economics, agroforestry, farm forestry 9648
      - forest plantations, nitrogen-phosphorus fertilizers, sandy soils 131
      - nitrogen-phosphorus fertilizers, increment, nutrient uptake 9468
    - *Atriplex,* choice of species, fodder, genetic resources 2556
    - *Azadirachta indica,* water harvesting, increment, biomass production 5173
    - *Dalbergia sissoo,* forest plantations, irrigation, stand establishment 8630
    - *Eucalyptus camaldulensis,* natural regeneration, soil 151
    - insect pests
      - *Achaea janata, Azadirachta indica,* biological control 9149
      - *Bruchidius andrewesi*
        - *Acacia tortilis*
          - fruits 5734
          - seeds 5734

- **India** *cont.*
  - Rajasthan *cont.*
    - insect pests *cont.*
      - *Prosopis cineraria* 626
    - *Prosopis cineraria*
      - pollination, insects 5675
      - progeny testing, early selection, plant morphology 2209
    - *Ziziphus rotundifolia,* agroforestry 3274
  - Sikkim
    - *Albizia stipulata,* agroforestry, biomass production, cycling 8432
    - *Alnus nepalensis,* agroforestry, cycling 4119
    - broadleaves, stand characteristics, stand structure, biomass production 1410
    - multipurpose trees, agroforestry, biomass production, cycling 8432
    - *Shorea robusta,* synecology, ground vegetation, biomass production 9933
    - *Tectona grandis,* synecology, ground vegetation, biomass production 9933
    - tropical forests, synecology, ground vegetation, biomass production 9933
  - Tamil Nadu
    - *Acacia melanoxylon,* forest plantations, protection, natural regeneration 4811
    - *Anacardium occidentale,* agroforestry, economics 725
    - biofertilizers, *Rhizobium, Acacia nilotica,* forest nurseries 142
    - birds, *Psittacula krameri,* broadleaved evergreen forests, nature reserves 696
    - broadleaved evergreen forests
      - natural regeneration, protection, forest plantations 4811
      - roots, biomass, dynamics 3712
    - deciduous forests, synecology, altitude 1365
    - deforestation, land use 721
    - *Eucalyptus globulus*
      - altitude, increment, photosynthesis 9682
      - essential oils, altitude, age of trees 9568
      - forest plantations, protection, natural regeneration 4811
    - *Eucalyptus grandis,* soil properties, pulpwood production, quality 283
    - *Eucalyptus tereticornis,* provenance trials 8563
    - farm forestry 4100
    - forest influences, precipitation, throughfall 9761
    - forest trees, seedling growth, photosynthesis, foliage 1261
    - fungal diseases
      - *Botrytis cinerea, Eucalyptus* 8293
      - *Fusarium oxysporum, Acacia holosericea* 2251
      - *Glomerella cingulata, Acacia holosericea* 2251
    - insect pests
      - *Atteva fabriciella, Ailanthus,* natural enemies 1485
      - forest trees, biological control 5806
      - surveys
        - *Paraserianthes falcataria*
          - forest nurseries 2300
          - forest plantations 2300
    - mammals
      - nature reserves
        - tropical forests
          - models 10076
          - sampling 10076
    - mangrove forests, aquatic organisms, metabolism 7291
    - mangroves, foliage, pigments, seasonal variation 4675
    - mistletoes
      - *Dendrophthoe falcata*
        - *Albizia amara* 2295

- **India** *cont.*
  - Tamil Nadu *cont.*
    - mistletoes *cont.*
      - *Dendrophthoe falcata cont.*
        - forests, surveys 2295
      - *Viscum orientale, Albizia amara* 2295
    - mixed forests, synecology, altitude 1365
    - multipurpose trees, farm forestry, soil fertility 2902
    - mycorrhizas
      - *Casuarina equisetifolia,* rhizosphere 3157
      - Fabaceae, surveys 3152
      - *Glomus,* Fabaceae, seedling growth 3153
      - *Sclerocystis rubiformis, Casuarina equisetifolia,* seedling growth 3153
    - *Prosopis juliflora,* variety trials, increment, plant morphology 1662
    - *Rhizophora apiculata*
      - planting, mangrove forests, estuaries 6113
      - vegetative propagation, hypocotyls 2603
    - scrub, synecology, altitude 1365
    - secondary forests, synecology, altitude 1365
    - social forestry, participation, development projects 4122
    - tropical forests, reproductive behaviour, phenology 2102
  - Uttar Pradesh
    - *Abies pindrow,* cones, diameter, seeds 1678
    - *Acacia mangium,* forest nurseries, growing media, sowing depth 9470
    - Acanthaceae
      - fruits 503
      - seeds 503
    - *Agathis robusta,* silviculture, exotics 9544
    - *Arundinaria falcata,* secondary forests, biomass production, cycling 3254
    - bamboos, *Dendrocalamus strictus,* biomass production, cycling 2701
    - *Bauhinia retusa,* shoot cuttings 113
    - *Bombax malabaricum,* forest litter, measurement, decomposition 3586
    - *Boswellia serrata,* soil chemistry, nitrogen, roots 5303
    - broadleaves
      - air pollution, growth, plant physiology 2869
      - indicator species, air pollution, traffic 5316
      - understorey, stand characteristics 5471
    - brushwood, understorey, synecology 522
    - *Carissa carandas,* air layering 114
    - *Casuarina equisetifolia*
      - canopy, acid deposition, nitrogen 5310
      - forest plantations, soil chemistry, nitrogen 356
    - *Celtis australis,* forest nurseries, techniques 5114
    - community forestry, choice of species, waste land, reclamation 4123
    - *Dalbergia sissoo*
      - forest litter, measurement, decomposition 3586
      - seed germination, seedlings, survival 2573
    - energy resources, planning, fuelwood, degraded forests 57
    - ethnobotany
      - reviews 6697
      - surveys, medicinal plants 7810
    - *Eucalyptus,* coppice, understorey, synecology 522

- **India** *cont.*
  - Uttar Pradesh *cont.*
    - *Eucalyptus camaldulensis,* provenance trials, forest influences, soil chemistry 66
    - *Eucalyptus tereticornis,* forest plantations, plant nutrition, biomass production 7973
    - flora 5439
    - forest management
      - community forestry 9292
      - population pressure 6205
    - forest soils, soil chemistry, humic acids, soil fertility 286
    - forest trees
      - biomass production, cycling 3864
      - forest plantations, soil biology, seasonal variation 7940
      - fuel plantations, choice of species 58
      - geographical distribution, altitude 1356
      - treelines 1356
      - vegetation types
        - biomass production, stand characteristics 6540
        - cycling 6541
    - forests 7290
      - grazing, fodder, production 682
      - soil biology, respiration 6294
      - soil types, mollisols, ultisols 7052
      - synecology, geology 1354
    - fungal diseases
      - *Populus deltoides,* forest nurseries, control 10024
      - *Ravenelia sessilis, Albizia chinensis,* forest nurseries 605
      - *Rhizoctonia solani, Paulownia fortunei,* seedlings 3163
    - *Grevillea banksii,* forest nurseries, sowing, growing media 140
    - *Grevillea robusta,* forest nurseries, planting stock, root pruning 145
    - insect pests
      - *Atteva fabriciella, Ailanthus,* natural enemies 1485
      - *Coptotermes heimi, Eucalyptus tereticornis* 2309
      - *Epipemphigus marginalis, Populus ciliata,* galls 632
      - *Hypsipyla robusta*
        - *Swietenia macrophylla,* biological control 672
        - *Toona ciliata,* biological control 672
      - *Odontotermes, Eucalyptus tereticornis* 2309
    - *Lantana camara,* scrub, biomass production, cycling 3254
    - *Leucaena leucocephala*
      - biomass production, equations 2499
      - forest plantations, nitrogen cycle 4531
    - *Litsea lanuginosa,* seed germination, seed treatment 9433
    - *Mangifera indica,* air pollution, susceptibility, plant physiology 2876
    - mistletoes
      - *Dendrophthoe falcata,* forest trees 6642
      - *Loranthus, Quercus,* age of trees 617
      - *Scurrula,* forest trees 6642
    - mites, *Eriophyes,* broadleaves, galls 2371
    - mountain forests
      - cycling 3633
      - erosion, land use, sustainability 9254
    - multipurpose trees
      - agroforestry, increment 4110
      - reclamation, mined land, economics 3248
      - species trials
        - reclamation
          - fly ash 9248
          - sodic soils 712

- **India** *cont.*
  - Uttar Pradesh *cont.*
    - national parks, tropical forests, biodiversity, nature conservation 5897
    - nitrogen fixing trees, short rotation forestry, biomass production 1736
    - *Pinus wallichiana,* earthquakes, growth rings, leaning stems 4605
    - plant parasitic nematodes, surveys, *Leucaena leucocephala* 1497
    - *Pongamia pinnata,* planting season, sodic soils 6115
    - *Populus*
      - clones, variety trials 62
      - variety trials 1654
    - *Populus ciliata,* seed germination, storage 9432
    - *Populus deltoides*
      - agroforestry, soil fertility 2413
      - biomass, forest litter, nutrients 1942
      - planting stock, survival, growth 155
      - spacing, cycling, biomass production 1941
      - variety trials, forest nurseries 9418
    - *Psidium guajava,* air pollution, susceptibility, plant physiology 2876
    - *Quercus*
      - soil chemistry 1902
      - stand characteristics 3936
    - *Quercus leucotrichophora*
      - degraded forests, plant succession 3254
      - foliage, nutrients, variation 429
    - *Quercus semecarpifolia,* forest litter, decomposition 8782
    - reclamation, waste land, sodic soils, research 8392
    - remote sensing
      - satellites
        - land use 3513
        - stand characteristics, biomass 2761
    - root nodules, *Casuarina equisetifolia,* nitrogen cycle 5568
    - scrub, synecology, geology 1354
    - *Shorea robusta*
      - climax communities, understorey, synecology 522
      - forest plantations 933
      - vegetation, degradation, synecology 1366
    - social forestry, development projects, books 730
    - sodic soils, classification, distribution 302
    - soil organic matter, soil types, vegetation types 7925
    - stand characteristics, biomass production, altitude 3052
    - *Tectona grandis*
      - flowering, seed quality 482
      - reproductive behaviour 7210
    - *Terminalia arjuna*
      - air layering 108
      - planting season, sodic soils 6115
    - *Terminalia chebula,* air layering 108
    - woody plants, air pollution, damage, urban areas 6328
  - West Bengal
    - *Acacia,* biomass production, soil chemistry, plant composition 2699
    - *Alnus nepalensis*
      - forest plantations, nitrogen cycle 4531
      - plant nutrition, cycling 1947
    - bamboos, *Bambusa arundinacea,* seeds, storage 2574
    - broadleaves, reproductive behaviour, phenology, abscission 388
    - *Callitris columellaris*
      - forest plantations
        - understorey
          - biomass production 4334

- **India** *cont.*
  - West Bengal *cont.*
    - *Callitris columellaris cont.*
      - forest plantations *cont.*
        - understorey *cont.*
          - soil properties 4334
    - *Cryptomeria japonica,* forest plantations, biomass production, plant composition 3482
    - *Eucalyptus,* social forestry, development projects, choice of species 6737
    - *Eucalyptus tereticornis,* forests, soil chemistry, statistical analysis 1901
    - Fabaceae, plant morphology, meiosis, variation 4650
    - forest management
      - participation, community forestry, projects 3497
      - sustainability 1014
    - forests, biodiversity, nature conservation, forest plantations 4970
    - mangrove forests, plant succession, seral stages, soil properties 284
    - mangroves
      - afforestation, erosion control 3225
      - foliage, anatomy, chlorophyll 9790
    - *Morus,* agroforestry, sericulture 2412
    - multipurpose trees, foliage, chemistry, fodder 7170
    - *Shorea robusta,* forests, soil chemistry, statistical analysis 1901
    - social forestry, development projects 8437
    - *Tectona grandis*
      - forests, soil chemistry, statistical analysis 1901
      - tissue culture, micropropagation, tree breeding 2598
- **Indian Ocean Islands,** *Phylica nitida,* deforestation, nature conservation, grazing, control 9297
- **Indicator plants**
  - amenity trees, air pollution, heavy metals, Greece 7106
  - coniferous forests
    - air pollution
      - heavy metals, Finland 3672
      - Sweden 8002
  - epiphytes, forest trees, air pollution, Sweden 6334
  - *Fagus sylvatica,* air pollution, chlorine, Switzerland 2495
  - forests
    - soil chemistry
      - nitrates
        - methodology 24
        - seasonal variation 24
  - mangroves, *Rhizophora mangle,* water pollution, mutations, assessment 9052
  - *Picea abies*
    - foliage
      - chemistry, air pollution, Sweden 1152
      - waxes, morphology, air pollution 8050
    - soil chemistry, nitrates, Sweden, seasonal variation 24
  - *Pinus,* air pollution, chlorinated hydrocarbons, Europe 1978
  - *Pinus radiata,* foliage, waxes, air pollution, New Zealand 3754
  - *Pinus sylvestris,* foliage, chemistry, air pollution, Sweden 1152
  - plant communities, USA, methodology, statistical analysis 7287
  - *Prosopis juliflora,* air pollution, heavy metals, USA 1162
  - virgin forests, lichens, carotenoids, Poland 7300
- **Indicator species**
  - broadleaves, air pollution, traffic, India 5316
  - Gastropoda, plant succession, old fields, France 9950
  - ground vegetation, Germany 9948

Indigenous knowledge
- agroforestry
  - data collection, Rwanda, methodology 10105
  - development
    - methodology 10103
    - Nepal 10104
- *Albizia coriaria,* agroforestry, Uganda, theses 9282
- *Azadirachta indica,* multipurpose trees, Kenya 6384
- *Cunninghamia lanceolata,* taungya, China 7572
- *Ficus natalensis,* agroforestry, Uganda, theses 9282
- forest management, sustainability, tropical forests, India 2724
- forestry development
  - Developing Countries, books 5925
  - sustainability, agroforestry, land use, Vanuatu 9255
- *Prosopis juliflora,* multipurpose trees, Kenya 6384
- tropical forests, forest management, sustainability, Latin America 7690
- woodlands, forest management, Zimbabwe, books 7627

Indigofera cylindracea, fodder, choice of species, Nepal 6948

Indigofera gerardiana
- biomass production, India, equations 789
- seeds, storage, seed germination, reclamation, India 79

Indigofera suffruticosa, seed dormancy, temperature, moisture, Mexico 2575

Indonesia
- *Acacia auriculiformis,* provenance trials, plant morphology, growth 5050
- afforestation, grasslands, *Imperata cylindrica* 7562
- agroforestry
  - conferences 2475
  - sustainability, erosion control 3262
- *Arenga pinnata,* wood chemistry 2058
- bamboos, research, conferences 2480
- birds, tropical forests, seed dispersal 1403
- broadleaves, wood chemistry 2059
- Chiroptera, tropical forests, seed dispersal 1403
- *Cocos nucifera,* wood chemistry 2058
- community forestry, development projects, non-governmental organizations, conferences 774
- deforestation 722
  - climate, simulation 3255
  - degraded forests, rehabilitation 8415
  - environmental protection, non-governmental organizations 6862
- *Eucalyptus*
  - taxonomy, new species 5433
  - vegetative propagation 6064
- *Eucalyptus deglupta,* seed germination, liquid fertilizers 859
- *Eucalyptus urophylla,* population genetics, isoenzymes 591
- farm forestry, surveys, trees, products, utilization 1548
- *Ficus,* genetic resources, taxonomy 8981
- forest management, sustainability 6203
- forest policy
  - economic development 9392
  - rain forests, nature conservation 7598
- forest resources
  - customary law, economic development, shifting cultivation 3344
  - forest products industries, timber trade 3346
- forestry development
  - intensive silviculture, ecology, environment 914
  - planning, human resources, development aid 5983
- fungal diseases, *Guignardia candeloflamma,* Arecaceae 8307
- insect pests
  - *Helopeltis antonii, Eucalyptus,* buds 1481
  - *Maconellicoccus hirsutus, Morus,* control 2378

Indonesia *cont.*
- international organizations, CIFOR, reports 759
- Meliaceae, wood anatomy 6407
- mycorrhizas, Dipterocarpaceae, books 755
- nitrogen fixing trees, pruning trash, chemistry, decomposition, agroforestry 1939
- provenance trials, *Acacia auriculiformis* 6867
- rain forests
  - forest policy, nature conservation, simulation 6849
  - nature conservation, planning, traditional society 2426
- selective felling 5123
- *Shorea*
  - seedling growth
    - *Acacia mangium,* soil, allelopathy 2159
    - mortality, NPK fertilizers 1710
- *Shorea parvifolia,* shoot cuttings 1686
- *Shorea stenoptera,* forest nurseries, transplanting, seedling growth 1719
- *Tectona grandis,* silviculture, forest management, forest policy 8668
- tropical forests, forest management, sustainability, forest policy 9391
- watersheds, rehabilitation, choice of species, planning 6700
- Bali, *Gliricidia sepium,* provenance trials, agroforestry, fodder 8567
- Irian Jaya
  - mangrove forests, utilization, forest management, conservation 7019
  - nature conservation, development projects 9299
- Java
  - *Acacia mangium*
    - forest plantations, grasslands, forest fires 1996
    - site class assessment, equations 1829
  - *Agathis*
    - resin tapping 196
      - copal, production 969
  - *Agathis dammara*
    - cones, production, estimation 1614
    - grafting, tree breeding 877
  - bamboos
    - *Bambusa vulgaris,* cleaning, yields 1800
    - *Gigantochloa,* cleaning, yields 1800
  - *Calliandra calothyrsus,* species trials 1653
  - canes and rattans
    - *Calamus,* plantations, silviculture 974
    - *Calamus manan,* silviculture, biology 973
    - *Daemonorops melanochaetes,* forest nurseries, fertilizers 1803
    - forestry development 971
    - improvement planting 972
  - *Dalbergia,* taxonomy, identification 2113
  - degraded forests, rehabilitation 1530
  - *Eucalyptus urophylla,* forest plantations, increment, growth models 1833
  - *Ficus,* pollinators 3037
  - forests, species diversity, national parks 2143
  - fungal diseases
    - *Curvularia, Eucalyptus,* control 2280
    - *Helminthosporium, Eucalyptus,* control 2280
    - *Pestalotia, Eucalyptus,* control 2280
  - *Gmelina arborea,* increment, site factors 1789
  - hydrology, land use, agroforestry 2397
  - information systems 6002

Indonesia *cont.*
- Java *cont.*
  - insect pests
    - *Apogonia expeditionis, Paraserianthes falcataria,* chemical control 8349
    - *Heteropsylla cubana, Leucaena leucocephala,* control 1503
    - *Macrochirus praetor*
      - *Daemonorops hystrix*
        - control 2379
        - damage 2342
        - light 2342
  - land use, conflict, logging, control 1543
  - *Leucaena diversifolia,* species trials 1653
  - *Leucaena leucocephala*
    - forest litter, decomposition, soil chemistry 1908
    - species trials 1653
  - mistletoes, Loranthaceae, *Tectona grandis* 1468
  - multipurpose trees
    - reclamation, eroded soils, community forestry, choice of species 3237
    - species trials, fodder, production 3371
  - nature reserves, management, degraded forests, simulation 7684
  - *Paraserianthes falcataria,* forest nurseries, growing media, phosphorus fertilizers 903
  - *Peronema canescens*
    - choice of species, soil fertility 825
    - shoot cuttings, liquid fertilizers 1687
  - *Pinus merkusii*
    - increment, taungya 2414
    - resin tapping, techniques 968
  - protection forests, rehabilitation 1529
  - *Pterocarpus indicus,* taxonomy, identification 2113
  - *Santalum album,* forest plantations, heartwood, soil properties 1985
  - *Shorea johorensis,* planting 1790
  - social forestry, participation, poverty, development projects 7585
  - *Swietenia macrophylla,* seedling growth, green manures 1711
  - taungya, socioeconomics 6728
  - *Tectona grandis*
    - dendroclimatology 10160
    - forest plantations
      - improvement planting 931
      - increment, forest economics 6188
    - forests, synecology, medicinal plants 1808
- Kalimantan
  - *Acacia mangium*
    - provenance trials 6026
    - site class assessment, equations 1829
  - agroforestry 6733
  - broadleaves, seedlings, identification 1324
  - canes and rattans, forest inventories, sampling 1847
  - Dipterocarpaceae, understorey, birds, ecology 6681
  - ectomycorrhizas, *Shorea,* planting stock, inoculation methods 4845
  - *Eucalyptus deglupta,* site class assessment, height, equations 1832
  - forest plantations, weeds, damage 1755
  - forest roads, planning 6202
  - forest trees, flora, lowland areas, books 4163
  - fruit trees, rain forests, improvement planting, economics 4109
  - fungal diseases
    - *Fusarium, Eucalyptus urophylla,* chemical control 1502
    - *Pythium, Eucalyptus urophylla,* chemical control 1502

Indonesia *cont.*
  Kalimantan *cont.*
    Gmelina arborea, increment, site factors 1789
    insect pests
      Macrotermes malaccensis, Eucalyptus urophylla, chemical control 1502
      Schedorhinotermes malaccensis, Eucalyptus urophylla, chemical control 1502
    land use, mapping, forest ownership, forest management 2758
    Metroxylon sagu, edible species 1809
    multipurpose trees
      afforestation, site preparation, fertilizers 7781
      reclamation, degraded forests, development 7560
    rain forests, selective felling, stand structure, logging effects 1738
    Shorea
      mycorrhizas, development, light intensity 2229
      secondary forests, improvement planting, methodology 7770
    swamps, understorey, birds, ecology 6681
  Nusa Tenggara
    agroforestry 1566
    broadleaves, forest plantations 930
    Daemonorops pericanthus, tillage, underplanting, *Cassia siamea* 6149
    forestry development 930
    Pterocarpus indicus, progeny testing, genetic variation, plus trees 6595
    Santalum album, heartwood, estimation, natural regeneration 6162
    taungya, development projects 1553
  Sulawesi
    broadleaves, wood chemistry 6448
    Eucalyptus deglupta, increment, growth models 1828
    Morus cathayana, agroforestry, sericulture 1805
    Neonauclea celebica, Formicidae, mutualism 10027
    Rhizophora mucronata, agroforestry, aquaculture 1528
  Sumatra
    Acacia mangium
      growth models 1831
      progeny testing, inheritance 2205
      site class assessment, equations 1829
    canes and rattans
      Calamus edulis, forest management, protection of forests 7803
      Calamus manan, increment, shade trees 1802
      forest inventories, sampling 1848-1849
    deforestation, shifting cultivation 5868
    Durio macrantha, taxonomy 8980
    Eucalyptus deglupta
      fruiting potential, estimation, equations 1613
      site class assessment, height, equations 1832
    Eucalyptus urophylla, progeny testing, genetics, plant morphology 2204
    forest trees, species trials, firebreaks 2000
    fungal diseases
      Curvularia, Eucalyptus, control 2280
      Helminthosporium, Eucalyptus, control 2280
      Pestalotia, Eucalyptus, control 2280
    Leucaena leucocephala
      Diospyros celebica
        mixtures
          growth 1788
          spacing 1788

Indonesia *cont.*
  Sumatra *cont.*
    Leucaena leucocephala cont.
      Swietenia macrophylla
        mixtures
          growth 1788
          spacing 1788
    mangroves, *Rhizophora apiculata,* spacing, increment 1776
    multipurpose trees
      acid soils, lime, agroforestry 4113
      agroforestry
        pruning
          plant competition 10102
          root systems 10102
      species trials, fodder, production 3371
    Neonauclea cyrtopoda, Formicidae, mutualism 10027
    Shorea, mycorrhizas, development, light intensity 2229
    virgin forests, agroforestry, birds, species diversity 7577
  Sunda Islands, *Leucaena,* agroforestry, innovation adoption 3260
  Timor
    agroforestry 1566
    Duabanga moluccana, seedling growth, NPK fertilizers, shading 6070
    Ficus benjamina, shoot cuttings 6051
    Santalum album
      forest plantations, heartwood, soil properties 1985
      seed weight, seed germination, seedling growth 6039
Industrial Countries
  agroforestry
    development, policy, land use 10096
    land use, change, Temperate Zones, conferences 9324
Information processing, forest inventories, computer techniques, Japan 6993
Information science, forestry, computer techniques, France 820
Information services
  computer techniques, Russia 4228
  databases, vegetation types, Russia 6836
  India 8548
Information systems, Indonesia 6002
Information technology, libraries, Ghana 5995
Infrared imagery, forestry, remote sensing, radar, integration, reviews 6241
Inga
  nectar, Costa Rica, chemistry 2983
  plant composition, amino acids, chemotaxonomy, evolution 8958
  seed germination, seed size, chemistry, water stress 8818
Inga dulcis
  shoot cuttings, growing media 864
  species trials, reclamation, mined land, Cuba 1540
Inga edulis
  afforestation, pastures, Costa Rica, stem form, growth 5051
  agroforestry, Brazil 2422
  improved fallow, plant colonization, biomass production, Peru 3266
  seedlings, morphology, identification, secondary forests, Peru 6431
Inga fagifolia
  seedlings, understorey, plant competition, Costa Rica 548
  wood anatomy 6430
Inga goldmanii, endophytes, *Solheimia costaspora,* branches, Costa Rica 9067
Inga pezizifera, seedlings, understorey, plant competition, Costa Rica 548
Inga thibaudiana, seedlings, morphology, identification, secondary forests, Peru 6431
Ingeae, plant composition, amino acids, chemotaxonomy, evolution 8958
Injection of trees (*see* Tree injection)
Injuries
  Abies grandis
    oleoresins, biosynthesis 6484
    resins, terpenoids 452
  Eucalyptus, wood defects, Australia 5344

Injuries *cont.*
  Fagus sylvatica, wood anatomy, abnormal development, discoloration 1214
  forest trees
    heartwood, discoloration, wood chemistry, trace elements 8092
    Switzerland 2093
  Picea rubens, defence mechanisms, USA, geographical variation 8110
  Pinus banksiana, thinning, Canada 946
  Pinus contorta, oleoresins, growth effects, USA 7206
  Populus interamericana, foliage, molecular genetics 2214
  Robinia pseudoacacia, wood anatomy, tyloses 398
Innovation adoption
  forestry, technology transfer, Pakistan 3347
  Leucaena, agroforestry, Indonesia 3260
Inonotus hispidus, fungal diseases, *Fraxinus excelsior,* wood anatomy 2968
Inonotus weirii (*see Phellinus weirii)*
Insect pests
  Acacia, Sudan 7428
  Acacia catechu, Pakistan, seeds 5679
  Acacia mangium, Philippines 3185
  Acacia nilotica, Tropics, damage 10031
  Acanthocinus griseus, Pinus, Japan, biology 6655
  Acantholyda erythrocephala, Pinus, Canada, control 678
  Aceria parapopuli, Populus tremuloides, galls, Canada 8345
  Achaea janata, Azadirachta indica, India, biological control 9149
  Acizzia, Acacia, Philippines, damage 2310
  Acizzia uncatoides, ornamental woody plants, USA, biological control 7509
  Acromyrmex lundii, Argentina 2301
  Adalia bipunctata, Rhaphiolepis umbellata, Japan 5761
  Adelges japonicus, Picea jezoensis, Japan, galls 5689
  Agrilus biguttatus, Quercus, Germany 10048
  Agrilus sexsignatus, Eucalyptus deglupta, Philippines, damage, control 1476
  Aleurites fordii, Pakistan, seeds 5679
  Alnetoidia alneti, broadleaves, UK 5690
  Altica bimarginata
    Salix cordata
      dunes, plant succession 5742
      foliage, morphology 5744
      resistance, genetic variation 5747
  Altica quercetorum, Quercus, Spain 5760
  Amata passalis, Santalum album, India, parasitoids 641
  Amblypelta lutescens, Murraya paniculata, Australia, parasitoids 2311
  amenity trees, UK, books 6
  Anacampsis populella
    Populus, air pollution, Russia 649
    Salix, air pollution, Russia 649
  Andricus californicus, Quercus, USA, host parasite relationships 2362
  Andricus quercuscalicis, Quercus cerris, spread, population genetics 2360
  Antheraea yamamai, Quercus, China, biology 7457
  Aonidia lauri, Laurus nobilis, Italy, life cycle 9140
  Aphididae
    Picea abies, UK, roots, air pollution 4573
    Pinus mugo, Italy 9143
  Aphis, ornamental woody plants, biological control, natural enemies 4899
  Aphrophora paguma, Pinus luchuensis, Japan 7434
  Apoderus tranquebaricus, Terminalia arjuna, India, damage 650
  Apogonia expeditionis, Paraserianthes falcataria, Indonesia, chemical control 8349
  Argentina, surveys 2301
  Argyresthia illuminatella, Abies alba, Italy, life cycle 9156

Insect pests *cont.*
- *Argyrodendron actinophyllum,* Australia, damage 624
- *Ascotis imparata, Pongamia pinnata,* India 10041
- *Aspidiotus cryptomeriae,* Gymnosperms, Japan 9144
- *Atta cephalotes, Rinorea deflexiflora,* Costa Rica, predators, *Paraponera clavata* 6661
- *Atta laevigata, Pinus caribaea,* Venezuela, host parasite relationships 4044
- *Atta sexdens,* Argentina 2301
- *Atta sexdens rubropilosa,* broadleaves, Brazil 7489
- *Atteva fabriciella, Ailanthus,* India, natural enemies 1485
- bamboos, Thailand 9135
- *Basileura osornoensis, Nothofagus dombeyi,* Chile, new species 2329
- *Betula*
  - hybrids, Finland 7427
  - Scandinavia, host parasite relationships, theory 4029
- biological control, integrated pest management, reviews 7502
- birds, *Abies balsamea,* Canada, ecology 7536
- *Blepharida, Bursera schlechtendalii,* foliage, resin canals, pest resistance 5751
- *Brasilianus lacordairei,* Argentina 2301
- *Brassolis sophorae,* Arecaceae, Venezuela 5732
- broadleaves, USA, canopy gaps, phenolic compounds 2306
- Bruchidae, *Acacia,* seeds, seed germination, establishment 6657
- *Bruchidius andrewesi*
  - *Acacia tortilis*
    - India
      - fruits 5734
      - seeds 5734
- *Bruchophagus sophorae, Sophora japonica,* seeds, Slovakia, damage 838
- *Bupalus piniarius*
  - *Pinus sylvestris*
    - air pollution
      - pest resistance, Germany 8335
      - plant composition, Germany 8335
    - Germany, damage 4883
- *Callidiellum rufipenne, Cryptomeria japonica,* Japan 7466
- *Caloptilia,* broadleaves, Europe, taxonomy 9154
- *Caloptilia serotinella, Prunus serotina,* behaviour 7449
- *Cameraria, Quercus emoryi,* USA, damage 642
- *Cameraria ohridella*
  - *Acer pseudoplatanus,* Austria 9158
  - *Aesculus hippocastanum*
    - Austria 9158
    - Germany 5726
- *Cardiaspina, Eucalyptus,* Australia, control 9138
- *Carmenta foraseminis, Gustavia superba,* seeds, Panama 7458
- *Caryedon serratus*
  - *Acacia,* chemical control 5781
  - *Acacia tortilis,* Pakistan, seeds 5679
  - *Tamarindus indica*
    - chemical control 5781
    - India, biology 2341
- *Castanea sativa,* Switzerland 184
- Cecidomyiidae, *Quercus cerris,* Austria, galls 5770
- *Cedestis subfasciella, Pinus,* Spain, biology, damage 8332
- *Cephalcia*
  - *Picea abies*
    - Italy 9174
    - Poland, chemical control 7499
- *Cephalcia arvensis*
  - *Picea abies*
    - Italy
      - biological control, by nematodes 5804
      - damage 4043

Insect pests *cont.*
- *Cephalcia arvensis cont.*
  - *Picea abies cont.*
    - Italy *cont.*
      - population dynamics 6663
- *Cephalcia fallenii, Picea abies,* Poland 7488
- *Cephalcia isshikii, Picea jezoensis,* Japan, damage, biology 4894
- *Cephisus siccifolius,* Argentina 2301
- Cerambycidae
  - conifers, Japan, attractants 4040
  - *Heritiera utilis,* Africa, damage, surveys 10030
- *Chaitophorus, Populus,* interactions, Formicidae 5754
- *Chilocorus rubidus, Quercus aliena,* Japan 9168
- *Choristoneura fumiferana*
  - *Abies balsamea*
    - biological control
      - bacterial insecticides 7507
      - Canada 7503
    - Canada
      - biological control 676
      - damage, stand structure 7536
      - dendrochronology 5702
    - feeding behaviour 2322
    - stand development, Canada 1412
  - *Bacillus thuringiensis,* pathogenesis 5727
  - Canada
    - *Bacillus thuringiensis,* resistance 8354
    - control, public opinion 2381
    - parasitoids 5723
  - chemical control 7506
  - conifers
    - biological control 675
    - stand development, simulation, Canada 4224
  - forest management, sustainability, Canada 237
  - forest trees, natural regeneration, USA 1487
  - *Picea glauca,* Canada 639
  - *Picea mariana,* Canada, biological control 676
  - simulation, USA, population dynamics 796
- *Choristoneura murinana,* Germany, biological control 5803
- *Choristoneura occidentalis*
  - *Abies grandis,* sampling, biological control 5800
  - conifers, dendrochronology, USA 6765
  - *Pseudotsuga menziesii*
    - foliage
      - carbohydrates, terpenoids 5718
      - chemistry, resistance 8093
    - sampling, biological control 5800
    - USA 8093, 9152
- *Choristoneura pinus*
  - *Pinus banksiana*
    - Canada, population dynamics 5715
    - USA, population dynamics 1482
- *Chrysocoris purpureus, Populus deltoides,* forest nurseries, India 7433
- *Chrysomela aeneicollis, Salix,* USA 654
- *Chrysomela confluens, Populus,* damage, ecology 5754
- *Chrysomela lapponica,* broadleaves, plant composition 2352
- *Chrysomela scripta, Populus,* USA, genetic diversity 9172
- Chrysomelidae
  - *Salix,* attractants, phenolic compounds 7472
  - USA, distribution 2343
- *Chrysophtharta bimaculata*
  - *Eucalyptus,* Australia, defoliation 7461
  - *Eucalyptus regnans*
    - Australia 6656
      - predators 5738
- *Cinara,* conifers, Bulgaria 631
- *Cinara costata, Picea abies,* Sweden, water stress, pest resistance 10032

Insect pests *cont.*
- *Cinara cupressi*
  - conifers, Malawi, biological control 8350
  - *Cupressus lusitanica*
    - Kenya
      - clones, resistance 1479
      - damage 7440
      - ecology 7445
    - Tanzania, clones, resistance 1479
- *Cinara pilicornis, Picea abies,* air pollution, ozone, Switzerland 5693
- *Cinara pini*
  - Argentina 2301
  - *Pinus,* Europe, taxonomy 630
- *Cinara setosa,* conifers, Italy, morphology 9142
- *Cinara todocola, Abies sachalinensis,* forest plantations, Japan, spacing 633
- *Clavigesta sylvestrana, Pinus,* Spain, biology, damage 8332
- *Clostera inclusa, Populus deltoides,* USA, damage 4037
- *Coccinella septempunctata, Quercus,* Hungary, ecology 9165
- *Coleophora laricella, Larix occidentalis,* Canada 638
- *Coleophora serratella, Betula,* UK, interactions 2320
- Coleoptera
  - forest trees
    - Germany 2355
    - Russia, disease vectors, decay fungi 9131
  - *Picea abies,* snow damage, Sweden, susceptibility 10045
  - *Pinus sylvestris*
    - Norway, distribution 2350
    - snow damage, Sweden, susceptibility 10045
    - Sweden, interactions, *Thanasimus formicarius* 7485
  - *Pseudotsuga menziesii,* USA 7478
  - rain forests, Malaysia, trapping 7481
  - *Ulmus minor,* Uzbekistan, control 657
- *Coloradia pandora, Pinus ponderosa,* thinning, USA 9148
- conifers
  - introduced species, Kazakhstan 10034
  - seed orchards, Canada, pest management 6667
  - USA, spread, imports 2303
- *Conophthorus radiatae, Pinus radiata,* USA, disease vectors 7400
- *Conotrachelus retentus, Juglans nigra,* USA 9164
- control, Canada 9190
- *Coptotermes formosanus, Azadirachta indica,* resistance 9137
- *Coptotermes heimi, Eucalyptus tereticornis,* India 2309
- *Corthylus punctatissimus, Acer,* USA 5743
- Cossidae, *Heritiera utilis,* Africa, damage, surveys 10030
- *Cossus cadambae*
  - *Tectona grandis*
    - India 2332
      - biology 2317
      - damage 2317
- *Criodion angustatum,* Argentina 2301
- *Cryptococcus fagisuga*
  - *Fagus,* North America, fungal diseases, *Nectria* 7401
  - *Fagus sylvatica,* bark, proteins, Germany 1480
- *Cryptorhynchus lapathi, Populus davidiana,* Korea Republic, resistance, heritability 8326
- *Curculio*
  - *Quercus,* Japan, parasitoids 658
  - *Quercus robur,* seeds, Croatia 4891
- *Curculio elephas, Castanea sativa,* France, ecology 2349
- Curculionidae
  - *Dalbergia sissoo,* Nepal 7462
  - France, disease vectors, fungal diseases 3186
  - *Pinus sylvestris,* Sweden 3435

Insect pests *cont.*
  Curculionidae *cont.*
    Quercus crispula, seeds, Japan, damage 10037
    Quercus wislizenii, USA 5745
  Cyclophragma yamadai, Quercus acutissima, Japan, biological control, nuclear polyhedrosis viruses 6650
  Cydia araucariae, Argentina 2301
  Cynipidae, *Quercus*, UK 6662
  Cyrtotrachelus, Thyrsostachys siamensis, thinning, pest resistance, Thailand 1775
  damage, Canada 8543
  Dasineura, Salix, Sweden 7496
  Dasineura marginemtorquens
    Salix viminalis
      biology, behaviour 9133
      Sweden, *galls* 5772
  deciduous forests
    Mexico, damage, measurement 6648
    USA, damage, simulation 1475
  defoliation, *Eucalyptus*, soil properties, Australia 7286
  Dendroctonus
    Pinus, symbionts, interactions 5758
    Pinus jeffreyi, USA, remote sensing 3187
  Dendroctonus brevicomis
    conifers, USA 7475
    Pinus ponderosa, USA, attractants 656
  Dendroctonus frontalis
    forest management, USA 10056
    Pinus (Southern)
      USA
        distribution 4889
        spread 653
    Pinus taeda
      attractants 655
      insecticides, toxicity 5784
      USA
        control 8352
        plant water relations 8338
    symbionts, fungi 8341
  Dendroctonus micans
    Picea abies
      biological control, France, *Rhizophagus grandis* 9185
      France 652
        biology, population dynamics 4890
  Dendroctonus ponderosae
    Pinus contorta
      Canada
        control 7479
        fungal diseases, *Ophiostoma* 6637
      USA, growth effects 7205
  Dendroctonus pseudotsugae
    Pseudotsuga menziesii
      USA
        disease vectors 5661
        pheromone traps 5735
    USA, trapping 8340
  Dendroctonus punctatus, Picea, North America, biology 8343
  Dendroctonus rufipennis
    forest management, decision making, North America, risk 4892
    Picea lutzii
      USA
        resistance 1491
        simulation 1491
    subalpine forests
      dendrochronology
        USA
          avalanches 3291
          forest fires 3291
  Dendrolimus, Pinus, China, research, pest management 2335
  Dendrolimus punctatus, Pinus massoniana, China, control 670
  Dendrolimus superans, Larix, Russia, biology 644
  Diaspididae, *Acacia saligna*, simulation, Israel, parasites 7443
  Didia, Bauhinia variegata, Pakistan, seeds 5679
  Dineura viridorsata, Betula tortuosa, Finland, biology 2361

Insect pests *cont.*
  Diorhabda lusca, Celtis australis, India, damage 1488
  Dioryctria abietella, conifers, India, biology 5730
  Dioryctria albovittella, Pinus edulis, soil fertility, mycorrhizas, interactions 4014
  Dioryctria horneana, Pinus, Cuba, oleoresins 5392
  Dioryctria sylvestrella
    Pinus pinaster
      France, damage 4882
      pruning, France, population dynamics 2337
  Diprion pini
    Pinus
      biology, plant composition 5765
      Germany, population dynamics 5767
    Pinus sylvestris
      France
        foliage, taxifolin 4667
        resistance, biology 627
  Diprionidae, *Pinus sylvestris*, Finland, foliage, monoterpenes 2367
  Disholcaspis quercusmamma, Quercus macrocarpa, street trees, USA 7491
  Donacia antiqua, Salix, foliage, plant physiology 6492
  Drepanosiphum platanoidis, Acer pseudoplatanus, population genetics 5696
  Dreyfusia nordmannianae
    Abies alba, Europe, biology 634
    Picea orientalis, Europe, biology 634
  Dreyfusia piceae
    Abies, Canada, predators 5695
    Abies fraseri
      genetic variation, USA 5686
      water stress 5687
  Dryocoetes confusus
    Abies lasiocarpa
      Canada
        aggregation pheromones 1489
        chemical control 1489
  ecology
    control, India, books 5
    wind damage, canopy gaps, Puerto Rico 3177
  Elatobium abietinum
    Picea sitchensis
      UK
        fertilizers 2612
        growth 3178
  Endoclita excrescens, Populus davidiana, Korea Republic, resistance, heritability 8326
  Epinotia nigricana, Abies alba, Italy 9155
  Epipemphigus marginalis, Populus ciliata, India, galls 632
  Epirrita autumnata, mixed forests, Estonia, pheromones 9153
  Erannis defoliaria, Quercus robur, France, biology, population dynamics 2316
  Eriocrania
    Betula, UK, interactions 2320
    Betula alba, Finland, air pollution 4886
  Eriophyes fraxinivorus, Fraxinus excelsior, Irish Republic 5682
  Ernobius punctulatus, Pinus radiata, USA, disease vectors 7400
  Essigella, Pinus 5692
  Eucallipterus tiliae, Tilia, biological control, USA 4898
  Eucalyptus
    Australia 7421-7425
      host parasite relationships, theory 4029
    provenance, Australia, resistance 4031
    tropical forests
      Australia 3175
        damage 3174
  Eucalyptus camaldulensis, Australia, damage 5681
  Eucalyptus globulus, Australia 7426

Insect pests *cont.*
  Eulecanium transvittatum, Acer negundo, Turkey 7435
  Euphydryas maturna, Viburnum opulus, Fraxinus excelsior, Sweden, parasitoids 5708
  Eutectona machaeralis
    Tectona grandis
      control 671
      development 7456
      entomogenous fungi, *Beauveria bassiana* 5710
  Euura amerinae, Salix pentandra, plant composition, phenolic glucosides 5768
  Exoteleia dodecella, Pinus, Spain, biology, damage 8332
  Fergusonina tillyardi, Eucalyptus deglupta, Philippines, damage, control 1476
  forest decline, forest management, France, fungal diseases, interactions 3819
  forest health
    France 6845
    Romania, damage, control 8524
  forest nurseries
    biological control 7501
    fungal diseases, Portugal 4160
  forest trees
    biological control, France 9184
    Brazil 5683
    Developing Countries, biological control 5805
    Europe 2305
    India, biological control 5806
    New Zealand, biological control, reviews 679
    North America 2305
    Romania, control 9188
  Forficula auricularia, Acacia longifolia, Italy, damage, natural enemies 2369
  Formica exsectoides, forest trees, USA, control 666
  Formicidae
    rain forests, Australia, ecology 662
    sclerophyllous forests, Australia, ecology 662
  Fraxinus, USA, identification 3173
  Gibberifera simplana subsp. *glaciata, Populus ciliata*, India, control 3192
  Gilpinia frutetorum, biology 1493
  Gilpinia hercyniae, Picea abies, Sweden, water stress, pest resistance 10032
  Gilpinia pallida, Pinus sylvestris, resistance, provenance trials, Finland 10049
  Godasa sidae, Mansonia altissima, Cameroon, biology 9161
  Gonioctena pallida, Salix phylicifolia, Russia, ecology 2351
  Gonipterus gibberus, Argentina 2301
  Gossyparia spuria, Ulmus, USA, parasitoids 5691
  Graellsia isabellae, Pinus sylvestris, France, resistance, biology 627
  Haematoloma dorsatum, conifers, Italy, ecology 9141
  Helopeltis antonii, Eucalyptus, Indonesia, buds 1481
  Hemiptera
    amenity trees, USA, control 5783
    Fraxinus, Iran, natural enemies 635
    Pinus taeda, USA 7438
    Salix, Iran, natural enemies 635
  Heterarthrus alnivorus, Alnus matsumurae, Japan 665
  Heterarthrus betulae, Betula ermanii, Japan 665
  Heterarthrus subflavipes, Alnus maximowiczii, Japan 665
  Heteropsylla cubana
    Leucaena
      India
        resistance 629
        species trials 629
      Malawi 6649
      parasitoids 7439
      Réunion, surveys, methodology 9139

Insect pests *cont.*
- *Heteropsylla cubana cont.*
  - *Leucaena leucocephala*
    - Africa 2312
    - Colombia 7444
    - Indonesia, control 1503
- *Holotrichia serrata, Tectona grandis,* forest nurseries, Sri Lanka, chemical control 5782
- *Homalodisca coagulata,* ornamental woody plants, biology 8329
- host specificity, *Populus,* hybrids, USA 6594
- *Hyblaea puera, Tectona grandis,* entomogenous fungi, *Beauveria bassiana* 5710
- *Hylesia nigricans,* Argentina 2301
- *Hylobius abietis*
  - conifers
    - behaviour 2347
    - shelterwood system, Sweden 4041
    - Sweden, control 10054
  - Czech Republic, monitoring 7477
  - forest trees, feeding behaviour 5759
  - *Picea sitchensis,* UK, damage 2353
  - *Pinus,* France, monitoring 5737
  - *Pinus sylvestris*
    - disease vectors 5757
    - forest plantations
      - Finland
        - models 10043
        - survival 10043
    - France, disease vectors, *Leptographium procerum* 3165
  - *Pseudotsuga menziesii,* France, control 2382
- *Hylobius pales, Pinus strobus,* antifeedants 5736
- *Hylobius radicis, Pinus sylvestris,* Canada, damage 7484
- *Hylobius warreni,* conifers, Canada, reviews 7467
- Hymenoptera
  - *Betula,* air pollution, Russia 663
  - *Pinus,* air pollution, Russia 663
  - *Pinus sylvestris,* Poland, chemical control 7499
- *Hypolixus truncatulus, Acacia nilotica,* India 4042
- *Hypsipyla grandella*
  - Argentina 2301
  - *Cedrela odorata*
    - Costa Rica, nutrient reserves, starch 6654
    - Cuba, damage 1483
  - *Swietenia macrophylla,* Cuba, damage 1483
  - *Swietenia mahagoni,* USA, chemical control 8351
  - *Toona ciliata,* resistance, plant composition 3742
- *Hypsipyla robusta*
  - *Swietenia macrophylla,* India, biological control 672
  - *Toona ciliata*
    - chemical control 5781
    - India, biological control 672
    - Pakistan, seeds 5679
- *Indarbela quadrinotata, Paraserianthes falcataria,* Bangladesh, chemical control 6666
- India, reviews, damage, control 6646
- *Ips*
  - *Picea abies*
    - interspecific competition 5739
    - pheromones 2348
- *Ips cembrae, Larix decidua,* Germany, resistance 2344
- *Ips grandicollis*
  - *Pinus*
    - Australia
      - ecology 2297
      - reviews 8337
- *Ips pini*
  - *Pinus,* USA 7482
  - *Pinus contorta,* Canada, aggregation pheromones 6658
- *Ips typographus*
  - *Picea abies*
    - Austria 7471

Insect pests *cont.*
- *Ips typographus cont.*
  - *Picea abies cont.*
    - Austria *cont.*
      - pheromone traps 9196
      - plant composition 2354
    - Germany, control 3191
    - Norway
      - disease vectors 10014
        - *Ophiostoma polonicum* 10015
    - Slovenia, control 3190
  - *Picea jezoensis*
    - Japan, trapping, aggregation pheromones 4900
    - logging, Japan, spread 7463
  - reserved forests
    - Sweden
      - incidence 10044
      - predators 10044
- Isoptera
  - *Eucalyptus tereticornis,* India 10035
  - Zimbabwe 2308
- *Kaltenbachiella japonica, Ulmus davidiana,* Japan, biology 7437
- *Khaya,* Côte d'Ivoire, damage 6647
- *Lambdina fervidaria, Tsuga canadensis,* USA 2330
- *Lambdina fiscellaria*
  - expert systems, control 5022
  - *Tsuga canadensis,* Canada, pheromones 5705
- *Larix decidua,* genetic transformation, herbicides, resistance 4834
- *Lasioptera yadokariae,* broadleaves, Japan 7493
- *Lauritrioza alacris, Laurus nobilis,* Albania, control 5807
- *Lepidomyctides nagaii, Bambusa multiplex,* South East Asia 7465
- Lepidoptera
  - *Alnus,* Germany 10042
  - *Betula*
    - Canada, behaviour 5716
    - Sweden, population dynamics, interactions 5714
  - biological control, parasitoids 9193
  - conifers
    - defoliation, Canada 4047
    - foliage, terpenoids, Canada 9146
  - *Eucalyptus,* Brazil 3181, 5713
  - *Eucalyptus urophylla*
    - Brazil
      - control 5802
      - population dynamics 5729
  - Fabaceae, Japan 5706
  - *Picea glauca,* Canada, chemical control 9187
  - *Populus,* genetic engineering, resistance 5724
  - *Quercus robur,* Russia, damage 10039
- *Lepidosaphes salicina,* shelterbelts, China, natural enemies 5688
- *Leucopholis irrorata, Calliandra calothyrsus,* Philippines 2302
- *Leuronota calycophylli, Calycophyllum spruceanum,* Peru, damage 5698
- *Lygropia clytusalis, Brachychiton,* Australia 2327
- *Lygus rugulipennis, Pinus sylvestris,* seedlings, damage 1478
- *Lymantria*
  - biological control, Belarus, parasitoids 10055
  - introduced species, population genetics, identification 7455
- *Lymantria dispar*
  - *Betula papyrifera,* carbon dioxide enrichment, plant composition 5711
  - biological control, by *Bacillus thuringiensis,* USA, reviews 5793
  - birds, USA 3179
  - broadleaves
    - USA
      - biological control 5796
      - biology 5733
      - resistance 2318
  - chemical control, birds, nontarget effects 673

Insect pests *cont.*
- *Lymantria dispar cont.*
  - computer techniques, damage 35
  - forest trees
    - foliage, biology 637
    - Germany, control 5795
    - USA
      - pheromone traps 674
      - physical control 7498
  - Germany, biological control 5803
  - history, North America 2333
  - New Zealand, introduced species 4884
  - North America, population dynamics, simulation 5709
  - *Pinus strobus,* carbon dioxide enrichment, plant composition 5711
  - *Populus*
    - biological control, foliage, chemistry 9192
    - USA, biology 645-646
  - *Quercus*
    - biological control, tannins 7508
    - Canada, biological control 677
    - feeding behaviour, site factors 2323
    - Germany 10057
    - insecticides, toxicity 9191
    - plant nutrition, USA, resistance 7446
    - USA
      - biology 645-646
      - control 5786, 5799
      - defoliation 3725
  - *Quercus rubra*
    - defoliation 2328
    - resistance, genetic variation 8331
    - USA, biological control 9162
  - *Robinia pseudoacacia,* Yugoslavia, pathogens 2325
  - simulation, population dynamics 2321
  - urban forestry, USA, control 5725
  - USA 5704
    - control 5785
    - monitoring 2324
    - natural enemies, entomogenous fungi 2336
    - sampling 9160
      - management 5720-5721
    - simulation
      - population dynamics 9151
      - spread, spatial distribution 636
- *Lymantria monacha*
  - Germany
    - biological control 5803
    - biology 8333
    - population dynamics 6651
- Lymantriidae, *Calliandra calothyrsus,* Philippines 2302
- *Macalla thyrsisalis, Swietenia mahagoni,* USA, chemical control 8351
- *Maconellicoccus hirsutus, Morus,* Indonesia, control 2378
- *Macrochirus praetor*
  - *Daemonorops hystrix*
    - Indonesia
      - control 2379
      - damage 2342
      - light 2342
- *Macrodiplosis, Quercus,* Irish Republic 5682
- *Macrotermes malaccensis, Eucalyptus urophylla,* Indonesia, chemical control 1502
- *Magdalis, Pinus nigra,* Spain, biology, damage 9147
- *Malacosoma disstria*
  - *Populus,* clones, defoliation, resistance 3182
  - *Populus tremuloides,* USA, population dynamics 5701
- *Malacosoma neustria,* Germany, biological control 5803
- *Matsucoccus feytaudi*
  - *Pinus pinaster*
    - forest decline, France 4036
    - France
      - monitoring, pheromone traps 5700
      - resistance, provenance trials 9970

Insect pests *cont.*
- *Matsucoccus josephi*
  - *Pinus*
    - Greece, geographical distribution, history 4881
    - Mediterranean Region 2315
    - Middle East, geographical distribution 8330
- *Matsucoccus thunbergianae*
  - *Pinus thunbergii*
    - Korea Republic 7441
      - monitoring, pheromone traps 5699
- *Mecorhis ursulus, Quercus,* Korea Republic, biology 9163
- *Megacyllene spinifera,* Argentina 2301
- *Megalopyge uruguayensis,* Argentina 2301
- *Megastigmus bipunctatus, Juniperus communis,* Russia 664
- *Megastigmus spermotrophus, Pseudotsuga menziesii,* Poland, chemical control 2376
- *Merobruchus major, Pithecellobium ebano,* seeds, damage, Mexico 4039
- *Metabolus flavescens, Ginkgo biloba,* China 7483
- *Microdiprion pallipes, Pinus,* Sweden 9173
- *Mnesampela privata, Eucalyptus globulus,* provenance trials, Australia 2554
- *Monochamus alternatus*
  - *Pinus*
    - biology 661
    - Japan
      - biological control, entomogenous fungi 2377
      - laboratory rearing 10047
  - *Pinus densiflora,* Japan, biology 5755
  - *Pinus thunbergii,* Japan, control 7480
- *Monochamus saltuarius*
  - *Pinus banksiana,* China 5740
  - *Pinus densiflora,* Japan, biology, seasonal behaviour 4888
- *Monochamus sutor*
  - *Picea abies,* plant parasitic nematodes 1495
  - *Pinus sylvestris,* plant parasitic nematodes 1495
- *Monochamus urussovii, Abies sibirica,* disease vectors, Deuteromycotina 10046
- multipurpose trees, browse plants, Nigeria 8325
- *Myllocerus undecimpustulatus, Terminalia,* India, chemical control 6668
- natural enemies, biological control, reviews, agroforestry, shelterbelts 9189
- *Nematus calais, Salix lasiandra,* USA, biology 2363
- *Nematus oligospilus, Salix,* Southern Africa, biology, damage 9175
- *Neodiprion gillettei, Pinus ponderosa,* defoliation, seedling growth 5766
- *Neodiprion sertifer*
  - Germany, biological control 5803
  - *Pinus resinosa,* defoliation 7490
  - *Pinus sylvestris*
    - Austria, pheromone traps 5791
    - Czech Republic, pheromone traps 5763
    - resistance, provenance trials, Finland 10049
    - Russia, population dynamics, spatial distribution 10050
    - Sweden, control 7504
- *Neomycta rubida, Metrosideros excelsa,* New Zealand, damage 4075
- *Nephopterix syntaractis, Avicennia marina,* defoliation, Hong Kong 10038
- *Noorda esmeralda,* Argentina 2301
- *Ocnerostoma piniariellum, Pinus,* Spain, biology, damage 8332
- *Odontotermes, Eucalyptus tereticornis,* India 2309
- *Oiketicus,* Argentina 2301
- *Oiketicus platensis,* Argentina 2301
- *Oncideres,* Argentina 2301

Insect pests *cont.*
- *Operophtera brumata*
  - Czechoslovakia, heavy metals, parasitoids 2331
  - *Quercus,* Belgium, ecology 5717
  - *Quercus robur*
    - France, biology, population dynamics 2316
    - Russia, foliage, regeneration 10040
- *Orgyia pseudotsugata*
  - *Abies lasiocarpa,* USA, damage 7459
  - conifers, Canada, control 5797
- *Oxycarenus lavaterae, Tilia cordata,* Yugoslavia 2314
- *Oxyops vitiosa, Melaleuca quinquenervia,* USA, biological control 6933
- *Panolis flammea, Pinus sylvestris,* Russia, damage 4885
- *Papilio canadensis,* broadleaves, USA 5712
- *Paranthrene robiniae,* Salicaceae, USA, insecticides 5792
- *Paranthrene tabaniformis*
  - *Populus*
    - galls, Bulgaria, ecology 643
    - Italy, monitoring, chemical control 6652
- *Paropsides soriculata, Crataegus,* China, biology 9166
- *Periphyllus californiensis, Acer amoenum,* Japan, development, growth 4880
- *Perthida glyphopa*
  - *Eucalyptus marginata*
    - Australia 5703
      - biology 5731
    - forest fires, Australia 6653
- *Phloeosinus,* conifers, Austria 9167
- *Phoracantha semipunctata*
  - Argentina 2301
  - *Eucalyptus*
    - biological control, USA 7500
    - biology 8344
    - USA
      - distribution 7469
      - resistance 5762
- *Phratora purpurea, Populus grandidentata,* USA 2343
- *Phratora vitellinae, Salix,* foliage, plant physiology 6492
- *Phylacteophaga froggatti, Eucalyptus globulus,* provenance trials, Australia 2554
- *Phyllaphis fagi*
  - *Fagus sylvatica*
    - plant nutrition
      - Belgium, forest nurseries 8328
      - Germany, defence mechanisms 5685
- *Phyllocnistis meliacella, Swietenia mahagoni,* USA, chemical control 8351
- *Phyllocolpa, Salix,* galls, keys 2366
- *Phyllonorycter, Quercus grisea × Quercus gambelii,* USA, parasites 5719
- *Phyllonorycter platani, Platanus,* UK, spread 7460
- *Phyllonorycter robiniella, Robinia pseudoacacia,* Italy, biology, damage 2334
- *Phytolyma lata, Milicia excelsa,* Ghana, resistance, phenotypic variation 10036
- *Picea abies*
  - cones
    - Norway 7431
    - Poland, parasitoids 2304
    - Switzerland 8327
- *Pineus havrylenkoi,* Argentina 2301
- *Pineus pini, Pinus,* Middle East, geographical distribution 8330
- *Pinus*
  - Cuba, population dynamics 9136
  - forest plantations, Venezuela 6645
  - seed orchards, USA, control 4045
- *Pinus sylvestris,* Poland, foliage, damage, assessment 4030
- *Pissodes piniphilus, Pinus sylvestris,* Finland, disease vectors, *Endocronartium pini* 5752-5753

Insect pests *cont.*
- *Pissodes strobi*
  - conifers, Canada, integrated pest management 7497
  - *Picea*
    - Canada 5750
    - North America
      - biological control 680
      - parasitoids 680
  - *Picea omorika,* Canada, damage 651
  - *Picea sitchensis*
    - Canada, resistance 1490
    - pest resistance 5756
  - *Pinus*
    - North America
      - biological control 680
      - parasitoids 680
  - *Pinus banksiana*
    - Canada 2359
      - control 9186
  - *Pinus strobus*
    - biology 5749
    - Canada 5750
    - USA 924
- *Pissodes terminalis, Pinus contorta,* biology 8342
- *Pityogenes chalcographus*
  - *Picea abies*
    - Austria, plant composition 2354
    - Germany, biological control 9171
- *Pityophthorus lichtensteini, Pinus,* UK 5741
- *Pityophthorus orarius, Pseudotsuga menziesii,* USA, seed orchards 7473
- *Plagiodera versicolora, Salix,* USA, biology 7468
- *Platypus, Nothofagus solandri,* New Zealand 6297
- *Platypus cylindrus, Quercus suber,* Portugal 7464
- *Platypus sulcatus,* Argentina 2301
- *Podosesia aureocincta, Fraxinus pennsylvanica,* biological control, USA, entomophilic nematodes 4897
- *Polydrusus ruficornis*
  - *Betula tortuosa*
    - Russia
      - damage 8336
      - ecology 2351
- *Polygonia c-album*
  - *Ulmus glabra*
    - biology 648
    - host specificity 648
- *Pongamia pinnata,* Pakistan, seeds 5679
- population dynamics, climatic change, reviews 2307
- *Populus,* Germany 7430
- *Prays fraxinella*
  - *Fraxinus excelsior*
    - UK 5707
      - feeding behaviour, dieback 8334
- *Pristiphora abietina*
  - *Picea,* air pollution, Austria 7487
  - *Picea abies*
    - Austria
      - integrated control 9176
      - predators 9176
    - Germany 10057
- *Pristiphora erichsonii*
  - *Larix laricina*
    - dendrochronology
      - Canada 5764
        - introduced species 1486
- *Prociphilus himalayensis, Pinus wallichiana,* India, biology 2313
- *Prosopis cineraria,* India 626
- *Prostephanus truncatus,* broadleaves, Mexico 7476
- *Pseudoregma, Thyrsostachys siamensis,* thinning, pest resistance, Thailand 1775
- *Pseudoregma bambucicola,* bamboos, *Bambusa multiplex,* Japan 9145
- *Psylliodes ruficolor, Quercus ilex,* Mediterranean Region, new species 659
- *Pterocomma populeum,* Argentina 2301
- *Pteroma plagiophleps, Rhizophora mucronata,* India 9150
- *Pulvinaria regalis,* amenity trees, UK, biology 5697

Insect pests *cont.*
- *Pyrrhalta luteola*
  - Argentina 2301
  - *Ulmus*
    - Argentina, biology, damage 2338
    - Australia 4980, 5787
      - bacterial insecticides 5790
      - biological control 5788
      - insecticides 5789
    - USA 7486
      - control 5798
      - parasitoids 5691
  - *Ulmus pumila*, USA, control 4046
- *Quadricalcarifera punctatella*
  - *Fagus crenata*
    - Japan 7454
      - predators, population dynamics 9159
- *Quercus alba*, birds, USA, growth 4908
- *Rabdophaga, Salix exigua*, USA 7495
- resistance, *Salix*, hybrids 5524
- *Retithrips syriacus, Eucalyptus globulus*, plant physiology 628
- *Rhagoletis pomonella, Crataegus*, USA, parasitoids 5771
- *Rhamnusium gracilicorne*, broadleaves, Kazakhstan, disease vectors, bacterial diseases 10019
- *Rhopalosiphum padi, Prunus virginiana*, Canada 7436
- *Rhyacionia buoliana*
  - Argentina 2301
  - *Pinus*, Ukraine, population dynamics 7450-7451
  - *Pinus radiata*, Chile, integrated control 1501
- *Rhyacionia frustrana*
  - *Pinus*, plant composition, host specificity 6451
  - *Pinus caribaea*, Cuba, biological control 1499-1500
  - *Pinus taeda*, USA, population dynamics 5728
- *Rhyparida limbatipennis*, broadleaves, forest decline, Australia 7204
- *Sacchiphantes abietis, Picea glauca*, Canada 7442
- *Salix*, foliage, USA 4032
- *Salix sericea*, genetic variation, USA, resistance 7429
- *Saperda inornata, Populus tremuloides*, USA, disease vectors 10011
- *Sarucallis kahawaluokalani, Lagerstroemia indica*, USA, control 2375
- Saturniidae, broadleaves, forest fires, Malawi 7452
- *Schedorhinotermes malaccensis, Eucalyptus urophylla*, Indonesia, chemical control 1502
- *Schizolachnus pineti, Pinus sylvestris*, air pollution, ozone, plant composition 4035
- *Schizomyia phillyreae, Phillyrea angustifolia*, reproductive behaviour, sex, Spain 4735
- *Schueziella fagicola, Fagus sylvatica*, galls 7494
- *Schueziella quercicola, Quercus robur*, galls, Germany 7494
- Scolytidae
  - Germany, trapping, nontarget effects 2356
  - legislation, UK, surveys 3184
  - *Lindera triloba*
    - Japan
      - fungal diseases, symbiosis 4887
      - symbionts 8339
  - *Picea abies*
    - Austria, terpenoids 2357
    - Germany 10057
  - *Pinus*, USA 5746
  - *Pinus contorta*, Canada, interactions 2345
  - *Pinus sylvestris*
    - France, disease vectors 1934
    - USA, interspecific competition 7470
  - population structure 10033
  - *Pseudotsuga menziesii*, USA, attractants 4893

Insect pests *cont.*
- *Scolytus, Ulmus*, UK, disease vectors 5633
- *Scolytus jaroshevskii, Elaeagnus*, Russia, disease vectors 10017
- *Scolytus laevis, Ulmus glabra*, Norway, disease vectors 2346
- *Semanotus japonicus, Cryptomeria japonica*, Japan, behaviour, ecology 2339
- *Sinoxylon conigerum, Hevea brasiliensis*, Malaysia, wood chemistry, effects 6659
- *Sirex noctilio*
  - *Pinus*, Argentina, control 1494
  - *Pinus radiata*, Australia, biological control 6660, 6664
  - *Pinus taeda*, Brazil, parasitoids 2364
- Slovenia, population dynamics 5680
- spatial distribution, boreal forests, remote sensing, Finland 7839
- *Spodoptera litura, Jatropha curcas*, India, biology 640
- *Stator beali, Pithecellobium ebano*, seeds, damage, Mexico 4039
- *Stereonychus fraxini, Fraxinus excelsior*, host parasite relationships 5748
- *Stilbosis quadricustatella, Quercus virginiana*, USA, resistance 7447
- *Strepsicrates ejectana, Eucalyptus deglupta*, Philippines, damage, control 1476
- surveys
  - *Paraserianthes falcataria*
    - forest nurseries, India 2300
    - forest plantations, India 2300
- *Synanthedon scitula, Cornus florida*, USA, biological control 2374
- *Tabebuia ochracea*, Brazil, damage, foliage 3176
- *Taeniothrips inconsequens*
  - *Acer saccharum*
    - USA
      - control 2254, 4033
      - damage 4034
      - plant physiology 1477
- *Tanaostigmodes tambotis*
  - *Spirostachys africana*
    - South Africa
      - biology 7492
      - new species 7492
- *Taxomyia taxi, Taxus baccata*, UK, population dynamics, parasitoids 2368
- termites, biology, control, teaching materials 7432
- *Tetranychus quercivorus, Quercus crispula*, Japan 9178
- *Thaumetopoea pityocampa, Pinus pinaster*, forest decline, France 4038
- *Thaumetopoea wilkinsoni, Pinus*, Israel, parasitoids 2365
- *Thecodiplosis brachyntera, Pinus sylvestris*, Europe 5769
- *Thecodiplosis japonensis*
  - *Pinus*
    - East Asia 5769
    - endophytes, Japan 8252
- *Thyridopteryx ephemeraeformis, Thuja occidentalis*, USA, control 6665
- *Thyrinteina arnobia, Eucalyptus citriodora*, Brazil 2326
- *Tomicus piniperda*
  - China, biology, control 2358
  - *Pinus*, China, life tables 9170
  - *Pinus sylvestris*
    - Finland, fungal diseases, damage 660
    - pruning, Sweden, resistance 3183
    - Sweden
      - control
        - natural enemies 2383
        - traps 2383
    - USA, control 9195
  - *Pinus yunnanensis*, China 9169
- Tortricidae, *Quercus crispula*, seeds, Japan, damage 10037
- *Tortrix viridana*
  - broadleaves, Ukraine, parasitoids, *Trichogramma telengai* 1484
  - *Quercus pyrenaica*, Spain, control, nontarget effects 9197

Insect pests *cont.*
- *Tortrix viridana cont.*
  - *Quercus robur*, Poland, forest decline 1299
- *Tribolium castaneum*
  - *Ceratonia siliqua*, chemical control 5781
  - *Juglans regia*, chemical control 5781
- *Xyleborus validus, Cryptomeria japonica*, Japan 7474
- *Xylocopa, Taxodioxylon gypsaceum*, old and fossil wood, Italy, damage 1492
- *Zeiraphera canadensis*
  - *Picea glauca*
    - Canada 5722, 7448
      - ecology 5694
      - resistance 2319
      - reviews 3180
    - phenology, Canada 647
- *Zeiraphera diniana, Pinus contorta*, UK 7453
- *Zethenia rufescentaria, Larix leptolepis*, Japan, natural enemies 9157

Insecticidal properties, *Azadirachta indica*, reviews, plant extracts 4375

Insecticide residues, diflubenzuron, *Quercus*, USA 9199

Insecticides
- aerial application, forests, Canada, simulation 9365
- application, *Pinus banksiana*, forest plantations, Canada 5794
- bacterial insecticides, nontarget effects, soil flora, laboratory tests 1498
- carbaryl, degradation, conifers 9194
- diflubenzuron
  - birds, nontarget effects 673
  - nontarget organisms, Vespidae, USA 7505
- fenitrothion, biodegradation, soil bacteria, Japan 1925
- forestry, Canada, research 2380
- malathion, birds, Spain, effects 9197
- metabolites, persistence, *Picea glauca*, Canada 9187
- nontarget effects, Apidae 8353
- residues
  - forest trees 7112
  - water pollution, Canada 5801
- tebufenozide, persistence, *Picea glauca*, Canada 9198

Insects
- *Abax parallelepipedus*, hedges, habitats, France, landscape ecology 7555
- *Ceratosolen galili, Ficus sycomorus*, Southern Africa, ecology 620
- Coleoptera, *Populus*, linear plantations, Germany, ecology 2298
- cones, reviews, interactions 5677
- cycads, flowers, Australia 3038
- ecology, subalpine forests, flowering, phenology, Japan 1304
- *Euglossa*, deforestation, Brazil, ecology 619
- flavonoids, interactions, reviews 9815
- forests, Netherlands, ecology 1519
- Formicidae, *Eucalyptus*, controlled burning, Australia 378
- Lepidoptera, broadleaves, Finland, food plants 2299
- *Pinus sylvestris*, honeydew, production, Germany 8681
- *Pseudomyrmex concolor, Tachigali myrmecophila*, mutualism, Brazil 2296
- *Schlechtendalia chinensis, Rhus chinensis*, galls, China, biology 9132
- species diversity, conservation, *Picea*, silvicultural systems, Norway 7418
- *Swietenia mahagoni*, pollination, USA, Thysanoptera 9129

Insolation
- *Pinus sylvestris*
  - foliage
    - measurement, canopy, Poland 3474
    - weight, canopy, Poland 3475
  - shoots, weight, canopy, Poland 3475

- **Integrated pest management**
  - insect pests, biological control, reviews 7502
  - ornamental woody plants, USA, books 6788
- **Interception,** *Quercus petraea,* thinning, France, effects 7066
- **Interest rates,** forest management, sustainability 7018
- **International agreements,** forests, environmental policy, conferences, UN 769
- **International cooperation**
  - agroforestry, education, South East Asia 9267
  - boreal forests
    - forest management
      - sustainability
        - Canada 9941
        - Europe 9941
        - Russia 9941
        - Scandinavia 9941
  - conifers, afforestation, trials, Russia 9502
  - forest decline
    - air pollution
      - Finland 6859-6860
      - Norway 6859
      - Russia 6859-6860
  - forest management, sustainability, assessment, Canada 9620
  - forestry, development projects, Thailand, reports 760
  - forestry development, development projects, Vietnam 1628
  - *Sesbania,* seed collection, genetic resources, Africa South of Sahara 3136
- **International organizations**
  - CIFOR, Indonesia, reports 759
  - forestry
    - research
      - CGIAR 6005
      - CIFOR 6005
      - ICRAF 6005
- **International trade,** forestry, Sweden, history 2517
- **Introduced species,** tropical forests, choice of species 6015
- ***Intsia bijuga,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- **Invertebrates,** *Picea abies,* boreal forests, forest management, Sweden 10029
- **Investment** (*see* Forest economics, investment)
- **Ionizing radiation,** damage, *Betula pendula,* seed germination, Ukraine 7979
- ***Ips amitinus,*** insect pests, legislation, UK, surveys 3184
- ***Ips cembrae,*** insect pests, *Larix decidua,* Germany, resistance 2344
- ***Ips duplicatus***
  - insect pests
    - legislation, UK, surveys 3184
    - *Picea abies*
      - interspecific competition 5739
      - pheromones 2348
- ***Ips grandicollis***
  - insect pests
    - *Pinus*
      - Australia
        - ecology 2297
        - reviews 8337
- ***Ips pini***
  - insect pests
    - *Pinus,* USA 7482
    - *Pinus contorta*
      - Canada
        - aggregation pheromones 6658
        - interactions 2345
    - *Pinus sylvestris,* USA, interspecific competition 7470
- ***Ips sexdentatus,*** insect pests, *Pinus sylvestris,* France, disease vectors 1934
- ***Ips typographus***
  - insect pests
    - legislation, UK, surveys 3184
    - *Picea abies*
      - Austria 7471
        - pheromone traps 9196
        - plant composition 2354
        - terpenoids 2357
      - Germany 10057
- ***Ips typographus*** *cont.*
  - insect pests *cont.*
    - *Picea abies cont.*
      - Germany *cont.*
        - control 3191
      - interspecific competition 5739
      - Norway
        - disease vectors 10014
          - *Ophiostoma polonicum* 10015
      - pheromones 2348
      - Slovenia, control 3190
    - *Picea jezoensis*
      - Japan, trapping, aggregation pheromones 4900
      - logging, Japan, spread 7463
    - reserved forests
      - Sweden
        - incidence 10044
        - predators 10044
- **Iran**
  - *Acer insigne,* silvicultural characters, species trials, France 7147
  - afforestation, water management, Arid Regions 1116
  - *Alnus subcordata,* silvicultural characters, species trials, France 7147
  - bacterial diseases, *Pseudomonas syringae, Parrotia persica* 8315
  - environmental protection, organizations 1874
  - *Fagus orientalis,* natural regeneration, stand structure, logging effects 6916
  - forest administration, organizations 1874
  - insect pests
    - Hemiptera
      - *Fraxinus,* natural enemies 635
      - *Salix,* natural enemies 635
  - silvicultural systems, selection system, forest management 6102
- ***Iriartea deltoidea***
  - height, foliage, morphology, Costa Rica 5376
  - stand characteristics, stability, Brazil, harvesting 1405
- **Irish Republic**
  - fertilizers, sewage sludge, legislation 8593
  - forest trees, nature conservation, arboreta 5003
  - insect pests
    - *Eriophyes fraxinivorus, Fraxinus excelsior* 5682
    - *Macrodiplosis, Quercus* 5682
  - mycorrhizas, forest nurseries, *Picea sitchensis* 8279
  - *Pinus sylvestris,* dendrochronology, bogs 9315
- ***Irpicomyces cornicola,*** fungal diseases, *Cornus florida,* Japan 2252
- **Irradiation**
  - *Dalbergia sissoo,* seeds, leaching, seed germination, seedling growth 2569
  - growing media, *Dalbergia sissoo,* seed germination, seedling growth 582
- **Irrigated stands**
  - *Acacia reficiens,* biomass, equations, Kenya 5960
  - *Acacia zanzibarica,* biomass, equations, Kenya 5960
  - economics, *Prosopis juliflora,* fuel plantations, Kenya 6242
  - *Eucalyptus camaldulensis,* volume determination, equations, Kenya 5960
  - *Eucalyptus microtheca*
    - provenance trials, plant physiology, plant water relations, Kenya 6022
    - soil chemistry, nutrients, Kenya 6371
  - *Eucalyptus tereticornis,* provenance trials, Kenya 6023
  - fuel plantations, environmental protection, research, development projects, Kenya 6001
  - mixtures, Azerbaijan, increment, weeds 1004
  - multipurpose trees
    - fuel plantations
      - biomass production, water use efficiency, Kenya 6021
- **Irrigated stands** *cont.*
  - multipurpose trees *cont.*
    - fuel plantations *cont.*
      - stand density, increment, Kenya 6131
  - *Prosopis juliflora*
    - biomass, equations, Kenya 5960
    - biomass production, pods, Kenya 6145
    - coppice, management, Kenya 6094
    - soil chemistry, nutrients, Kenya 6371
  - *Terminalia brownii,* volume determination, equations, Kenya 5960
  - waste water, *Populus interamericana,* short rotation forestry, Canada, growth 1752
- **Irrigation**
  - *Acacia,* forest nurseries, seedling growth, Jordan 7767
  - *Acer,* seedling growth 6929
  - *Alnus rubra,* reproductive behaviour, spacing, fertilizers, USA 9869
  - bamboos, *Bambusa tulda,* planting season, India 2673
  - conifers, fertilizers, acid deposition, Europe 3632
  - *Dalbergia sissoo,* forest plantations, stand establishment, India 8630
  - distillery effluent, *Albizia procera,* seed germination, India 6879
  - *Eucalyptus globulus*
    - roots
      - development, fertilizers, Portugal 8048
      - fertilizers, soil properties, Portugal 8767
  - *Eucalyptus polybractea,* essential oils, Australia 4376
  - fungal diseases, *Discula destructiva, Cornus florida,* USA 4868
  - leachates, broadleaves, plant physiology, Canada 1753
  - *Madhuca longifolia,* reclamation, waste land, India 1539
  - mycorrhizas, *Tuber, Corylus avellana* 5613
  - ornamental woody plants, container grown plants, USA 6756
  - *Phoenix roebelenii,* transplanting, water stress, defoliation 4981
  - *Picea abies*
    - fertilizers, plant nutrition, Sweden 4538
    - increment, Denmark 6930
    - lime, mycorrhizas, enzymes 9993
    - NPK fertilizers, increment, Denmark 911
    - nutrient balance, fertilizers, Sweden 7966
    - roots, nutrient uptake, Sweden 9788
  - *Picea glauca,* nitrogen fertilizers, weed control, Canada 4337
  - *Pinus contorta,* NPK fertilizers, increment, Denmark 911
  - *Pinus sylvestris,* container grown plants, water availability, growth 6077
  - projects, bottomland forests, stand characteristics, Kenya 6574
  - *Prunus,* nitrogen fertilizers, forest nurseries, UK 4311
  - *Pseudotsuga menziesii,* cycling, fertilizers, Netherlands 7963
  - *Quercus ilex*
    - fertilizers, Spain, interactions 3415
    - foliage, fertilizers, Spain, plant composition 3752
  - *Quercus virginiana,* mined land, USA, reclamation 4091
  - saline water
    - agroforestry, water purification, USA 10112
    - broadleaves
      - planting, Spain 160
      - shelterbelts 1534
    - multipurpose trees, species trials, shelterbelts, Saudi Arabia 2559
  - sewage effluent, *Pinus radiata,* soil fauna, New Zealand 7938
  - *Terminalia brownii,* forest plantations, water stress, Kenya 3611
  - tropical forests, Panama, insects 2123

- **Irrigation** *cont.*
  - waste water, multipurpose trees, forest nurseries, Niger 9473
- ***Irvingia gabonensis***, species trials, agroforestry, soil properties, soil types, Nigeria 6868
- ***Irvingia grandiflora***, foliage, photosynthesis, plant water relations, Cameroon 313
- ***Iryanthera grandis***, fruits, chemistry, chalcones 8912
- ***Isoberlinia angolensis***
  - savanna woodlands, phenology, plant nutrition, Zambia 6308
  - seed germination, seedling growth, soil chemistry, carbon, Zambia 5239
- **Isoenzymes** (*see* Enzymes, isoenzymes; Genetics, isoenzymes)
- ***Isopogon ceratophyllus***, sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi*, Australia 3954
- **Isoptera**
  - forest litter, Amazonia 5678
  - insect pests
    - *Eucalyptus tereticornis*, India 2309, 10035
    - Zimbabwe 2308
  - vegetation types, soil fauna, Nigeria 8801
- **Isotopes**, oxygen, forest trees, sap, groundwater, South Africa 2832
- **Israel**
  - afforestation
    - semiarid zones, water harvesting, runoff 6697
    - watersheds, hydrology, water harvesting 8379
  - broadleaves, plant water relations, stomatal resistance, abscisic acid 2083
  - *Cupressus sempervirens*, cones, longevity, seed dispersal 5421
  - *Eucalyptus*, water harvesting, contour ridging, slope, aspect 9511
  - forest fires, erosion 8885
  - forest trees, provenance trials, drought resistance, soil fertility 6013
  - fungal diseases, *Diplodia pinea*, *Cupressus sempervirens*, antifungal agents 6629
  - insect pests
    - Diaspididae, *Acacia saligna*, simulation, parasites 7443
    - *Matsucoccus josephi*
      - *Pinus* 2315
        - geographical distribution 8330
    - *Pineus pini*, *Pinus*, geographical distribution 8330
    - *Thaumetopoea wilkinsoni*, *Pinus*, parasitoids 2365
  - *Pinus halepensis*
    - fire effects, synecology 1199
    - forest fires, natural regeneration, forest management 9777
    - water stress, sap flow, transpiration 7947
  - *Quercus ithaburensis*
    - foliage, phenology, genetic variation 3709
    - nitrogen fixation, *Azospirillum brasilense*, seedling growth 7407
  - rodents, *Pinus halepensis*, fire ecology 1196
  - *Sesbania sesban*, biomass production, estimation, equations 7670
  - woodlands, forest litter, soil chemistry 5257
- **Italy**
  - *Abies alba*
    - air pollution, foliage, provenance 6330
    - forest decline, dendrochronology 8942
    - genetic variation, isoenzymes, outcrossing 5511
    - history 806
    - stand characteristics, forest ecology 8667
    - stems
      - snow damage 280
      - wind damage 280
- **Italy** *cont.*
  - afforestation
    - history 2476
    - site preparation, forestry machinery, research 6118
    - subsidies 1638
  - agroforestry, land use 9271
  - *Alnus cordata*
    - clones, grafting, growth 8579
    - reclamation, mine spoil, symbiosis 2406
    - seeds, seed collection, viability, storage 8571
    - thinning, growth 1772
  - amenity value of forests 8447
  - *Arbutus unedo*, reproductive behaviour, climate 3838
  - bacterial diseases
    - *Pseudomonas syringae*
      - *Laurus nobilis* 613
      - *Syringa vulgaris* 613
  - biodiversity, forestry 5974
  - birds
    - species diversity, hedges, botanical composition 6702
    - *Tetrao urogallus*, ecology 698
  - broadleaves
    - afforestation, agricultural land, forest economics, subsidies 159
    - coppice
      - research 8616
      - silvicultural conversion, plant physiology 8935
    - foliage, stomata, density, carbon dioxide enrichment 2048
    - forest plantations, mixtures, growth 8626
    - phenology, synecology 9957
    - stand characteristics 8658
    - stand development, climate, light, phenology 8665
    - vegetation, surveys, soil types 303
  - *Castanea sativa*
    - coppice
      - stand characteristics, logging, temporal variation 8611
      - stand structure 9535
    - forest resources, silviculture 3465
  - *Cedrus atlantica*, grafting, provenance 9449
  - conifers
    - dendroclimatology, defoliation, growth 4989
    - forest plantations
      - decay fungi, ecology, succession 6606
      - thinning 945
    - light, diameter, growth effects 6362
    - plant water relations 3615
  - coppice
    - forest management
      - multiple use 8724
      - reviews 8617
    - logging, damage 8671
  - *Cupressus sempervirens*
    - shoot cuttings 4290
      - resistance, fungal diseases 6052
    - variety trials, site factors, plant morphology 6020
  - data banks, forest trees 214
  - deer, *Capreolus capreolus*, biology, population dynamics 1517
  - edible fungi
    - classification, keys, books 8468
    - legislation 6157
    - *Tuber*, *Quercus suber* 207
    - *Tuber magnatum*, soil properties 987
  - education, forest economics 7856
  - *Erica arborea*
    - carbon dioxide enrichment
      - plant composition 7031
      - plant physiology 7031
  - erosion, simulation 9239
  - *Eucalyptus camaldulensis*, shelterbelts, microclimate, effects 6701
  - *Eucalyptus occidentalis*, forest plantations, silvicultural conversion, coppice, runoff 4935
  - exotics, landscape, forest management, aesthetic value 9608
- **Italy** *cont.*
  - *Fagus sylvatica*
    - acid deposition, throughfall, stemflow, chemical composition 337
    - air pollution, foliage, provenance, damage 5340
    - coppice, silvicultural conversion, stand structure 8602
    - coppice with standards, silvicultural conversion 6093
    - dendroclimatology 2442
    - genetic variation, isoenzymes 8250
    - light penetration, growth, morphology 6260
    - plant water relations
      - cavitation
        - genetic variation 3607
        - seasonal variation 7069
  - farm forestry, afforestation, agricultural land 10093
  - fire detection, planning 376
  - fire prevention, vegetation, surveys 8876
  - flora, urban areas 5438
  - forest decline
    - forest inventories 3026
    - forest trees, crown 3025
  - forest economics
    - afforestation, agricultural land, economic theory 4461
    - valuation, history 6246
  - forest fires
    - fire behaviour, simulation 364
    - fire danger
      - assessment 371
      - economics 6373
    - fire prevention, meteorological factors 6374
  - forest health
    - monitoring 5978
    - surveys 4718
  - forest inventories 9626
  - forest management
    - forest policy, land use planning 6208
    - planning, decision making, research 8725
    - theory 7832
  - forest nurseries
    - afforestation 143
    - containers 144
    - soil solarization 5118
  - forest plantations
    - silviculture 6012
    - species diversity, vegetation, surveys 1744
    - stand characteristics, mortality 951
  - forest policy, ministries of agriculture 8526
  - forest resources, forest management 805
  - forest trees
    - afforestation, agricultural land, forest economics 158
    - coastal areas, air pollution, salt spray, surfactants 8837
    - crown, forest decline, assessment, methodology 5951
    - diameter, variation 2685
  - forestry workers, Lyme disease 1649
  - *Fraxinus excelsior*, volume tables 6175
  - fungal diseases
    - *Biscogniauxia nummularia*, *Fagus sylvatica*, water stress 9104
    - *Botryosphaeria ribis*, *Juglans* 2273
    - *Cryphonectria parasitica*
      - *Castanea sativa*
        - biological control, hypovirulence 9126
        - grafting 6634
    - endophytes, forest trees, reviews 6625
    - *Fusarium*, *Pinus nigra*, forest nurseries, control 1467
    - *Heterobasidion annosum*, *Abies alba* 608
    - *Melampsora populnea*, *Populus tremula* 609
    - *Pestalotiopsis funerea*, *Thuja orientalis* 2266
    - *Phellinus pilatti*, *Populus alba*, damage, new species 10006
    - *Phellinus torulosus*, *Cupressus sempervirens* 5626

- **Italy** *cont.*
  - fungal diseases *cont.*
    - *Populus,* integrated control, techniques 8319
    - *Pythium, Pinus nigra,* forest nurseries, control 1467
    - *Quercus,* forest decline, drought resistance 8119
    - *Rhizoctonia, Pinus nigra,* forest nurseries, control 1467
    - *Seiridium cardinale*
      - *Cupressus sempervirens*
        - increment 9106
        - resistance 6020
          - damage 4021
  - insect pests
    - *Aonidia lauri, Laurus nobilis,* life cycle 9140
    - Aphididae, *Pinus mugo* 9143
    - *Argyresthia illuminatella, Abies alba,* life cycle 9156
    - *Cephalcia, Picea abies* 9174
    - *Cephalcia arvensis*
      - *Picea abies*
        - biological control, by nematodes 5804
        - damage 4043
        - population dynamics 6663
    - *Cinara setosa,* conifers, morphology 9142
    - *Epinotia nigricana, Abies alba* 9155
    - *Forficula auricularia, Acacia longifolia,* damage, natural enemies 2369
    - *Haematoloma dorsatum,* conifers, ecology 9141
    - *Paranthrene tabaniformis, Populus,* monitoring, chemical control 6652
    - *Phyllonorycter robiniella, Robinia pseudoacacia,* biology, damage 2334
    - *Xylocopa, Taxodioxylon gypsaceum,* old and fossil wood, damage 1492
  - *Juglans,* afforestation, agricultural land 2632
  - *Juglans regia*
    - genetic variation
      - isoenzymes
        - foliage, morphology 5554
        - fruits, morphology 5554
    - geographical distribution, silvicultural characters, plant morphology 6138
    - phenotypic selection, genetic improvement 6031
  - *Juniperus,* chemotaxonomy, essential oils 6516
  - *Juniperus phoenicea*
    - essential oils
      - foliage 435
      - fruits 435
  - land use
    - land classification, environmental protection 715
    - remote sensing, geographical information systems 8734
  - land use planning, legislation, mountain areas 6714
  - landscape ecology, national parks 6750
  - *Larix decidua,* forest resources, forest management, stand characteristics, landscape 9540
  - marking, tools, history 211
  - mites, *Aceria bezzii, Celtis australis,* buds, damage 668
  - mountain areas, landscape, remote sensing, methodology 6715
  - mycoplasmal diseases, *Alnus* 5668
  - mycorrhizas
    - classification, keys, books 8468
    - *Tuber magnatum,* broadleaves 6609
  - national parks, land use 8481
  - ornamental woody plants, pollen, spread, coastal areas 5912
  - *Ostrya carpinifolia,* coppice, yield tables 2711
  - phytogeography, global warming, mediterranean climate 6256

- **Italy** *cont.*
  - *Picea abies*
    - artificial regeneration, direct sowing, tree guards 6114
    - Christmas trees
      - forest economics, production, quality 3468
      - paclobutrazol 4371
    - genetic variation
      - bark, terpenoids 2060
      - forest decline, air pollution, sampling 2191
    - plant colonization, grasslands 6566
  - *Pinus*
    - growth rings, wood chemistry 1249
    - soil formation 8783
  - *Pinus halepensis,* natural regeneration, sampling, statistical analysis 1739
  - *Pinus leucodermis*
    - genetic variation, chemotaxonomy 2194
    - self pollination 3974
  - *Pinus nigra*
    - population genetics, isoenzymes 2187
    - seed treatment, fungicides 1467
    - stand characteristics, natural regeneration, silvicultural systems 3429
  - *Pinus pinea,* foliage, air pollution, waxes, damage 5341
  - *Pinus radiata,* site class assessment, growth models, height, stand age 3486
  - *Pinus sylvestris,* volume tables 8694
  - plant parasitic nematodes, *Bursaphelenchus mucronatus, Pinus pinaster* 9182
  - *Platanus acerifolia,* street trees, Arachnida, surveys 10025
  - pollen, allergens 6006
  - *Populus*
    - farm forestry, land use, agricultural land, economics 6245
    - genetic variation, wood properties 6604
    - short rotation forestry
      - land use, abandoned land 6136
      - subsidies, setaside 1640
    - silviculture, statistics 6135
  - *Populus nigra* var. *italica,* air pollution, lead, urban forestry 7992
  - protection forests, hydrology, economics 703, 6699
  - *Pseudotsuga menziesii*
    - site class assessment, height 6181
    - spacing, stand density, volume, biomass 9587
  - *Quercus*
    - carbon dioxide enrichment, plant composition, photosynthesis 4465
    - firebreaks, agroforestry 3273
    - soil formation 8783
  - *Quercus cerris*
    - coppice
      - silvicultural conversion 8608
        - forest litter, leaf area index 8664
        - leaf area index, estimation 8898
        - plant physiology 8935
        - soil properties 8792
        - stand structure 8609-8610
    - deciduous forests, stand characteristics 6546
    - foliage, measurement, equations 9582
    - forest management 7833
    - photosynthesis, plant water relations 7194
    - silvicultural conversion, agroforestry 1558
  - *Quercus coccifera,* geographical distribution 9918
  - *Quercus frainetto,* silvicultural characters, stand characteristics, geographical distribution 6391
  - *Quercus ilex*
    - foliage, chlorophyll, methodology 781
    - forest litter, decomposition, soil pollution, heavy metals 7908
    - photosynthesis, water stress 6256

- **Italy** *cont.*
  - *Quercus pubescens,* aerial photography, infrared photography, forest health 6232
  - *Quercus robur*
    - dendrochronology, drought, adaptation 4508
    - micropropagation, techniques 6058
  - *Quercus suber*
    - grafting, techniques 6066
    - tissue culture, micropropagation 4293
  - reclamation, polluted soils, landscape 3247
  - sample plot technique, relascopes 4440
  - short rotation forestry, forest economics 9486
  - shrubs, seed dispersal, Formicidae 3830
  - site preparation, forest plantations, runoff, erosion 7782
  - soil
    - erosion 708
    - water erosion, losses, mapping 704
  - stream training, dams, design, construction 10084
  - street trees, management, planning 9308
  - surveying, global positioning systems 8740, 9636
  - *Tilia*
    - seeds, propagation 5062
    - shoot cuttings 5062
  - tractors, utilization 7796
  - *Ulmus minor,* mycoplasmal diseases, witches' brooms 5670
  - urban forestry, management, planning 9308
  - water resources, land use 705
- **IUFRO,** *Pinus sylvestris,* provenance trials, Europe 831
- ***Ixora singaporensis,*** fungal diseases, *Phoma herbarum,* India, new host records 9115
- ***Jacaranda copaia***
  - plant water relations, gas exchange, French Guiana 4506
  - secondary forests, natural regeneration, stand structure, Peru 6578
- ***Jacaranda mimosifolia***
  - foliage, chemistry, fodder, India 7170
  - urban forestry, beekeeping, South Africa 6951
- ***Jacquinia pungens,*** seedling growth, plant nutrition, nutrient availability 6309
- **Jamaica**
  - broadleaves, plant colonization, landslides 4793
  - *Brosimum alicastrum,* seed collection, planting stock, establishment 2621
  - Fabaceae, direct sowing, species trials, agroforestry 2420
  - forest trees, natural regeneration, hurricanes 1891
  - *Gliricidia sepium,* direct sowing, agroforestry 2419
  - *Leucaena leucocephala,* direct sowing, agroforestry 2419
  - nature conservation 8443
  - *Pinus caribaea,* forest plantations, research 953
  - plant colonization, landslides 6563
  - wind damage, mountain forests, topography 1080
- **Japan**
  - *Abies*
    - plant competition, stand structure, mixed forests 4798
    - pollen, palaeobotany, DNA 9914
    - wood anatomy, palaeoecology 8990
  - *Abies mariesii*
    - chloroplast genetics, clines 5497
    - cones, production, diameter 4736
  - *Abies sachalinensis*
    - clones, heritability, wood properties 7118
    - stand structure, canopy gaps, understorey, growth 8659
    - thinning, slopes, geographical information systems, planning 6934
    - wood properties, tree breeding 2032
  - *Abies veitchii,* subalpine forests, ice damage 9673

Japan *cont.*
- *Acer rufinerve,* reproductive behaviour, sex expression 6508
- afforestation, forest economics, profits 7857
- *Alnus hirsuta,* root nodules, *Frankia* 9999
- *Araucaria,* palaeobotany 4646
- bacterial diseases, *Pseudomonas syringae, Rhaphiolepis umbellata,* galls, new species 2287
- bamboos, *Phyllostachys bambusoides,* carbon cycle, biomass production, simulation 4530
- *Betula platyphylla*
  - crown, biomass, measurement 1843
  - stand density, plant competition, yield forecasting 8697
- botanical composition, topography, plant succession 9014
- broadleaved evergreen forests, stand structure, natural regeneration, canopy gaps 8178
- broadleaves
  - canopy gaps, natural regeneration, botanical composition 9021
  - coppice, stand structure, snow damage 6267
  - crown, branches, development, morphology 9795
  - foliage
    - colour, seasonal behaviour 8045
    - photosynthesis, measurement, techniques 3316
  - forest litter
    - cycling, seasonal variation 7894
    - evaporation, simulation 4491
  - pioneer species, topography, plant morphology 8765
  - plant water relations, drought resistance 311
  - pollen, allergens 5046
  - reclaimed land, marine sediments, stand development 6703
  - spoil banks, natural regeneration, plant succession 1741
  - stem form, snow, resistance 2954
  - stems, mechanics, wind 1221
  - wood anatomy, growth effects 7115
- *Carpinus,* reproductive behaviour, seeds, seedlings, old-growth forests 7211
- *Carpinus laxiflora,* genetic variation, isoenzymes 2203
- *Castanopsis cuspidata,* seed dispersal, stand characteristics 9960
- *Chamaecyparis,* plant morphology, canopy, effects 9792
- *Chamaecyparis obtusa*
  - biomass, increment, respiration 8707
  - dendrochronology, forest ecology 6761
  - evapotranspiration
    - forest influences, microclimate 1117
    - soil water 3600
  - forest economics, profitability, analysis 2783
  - forest influences
    - microclimate 1189
    - soil fauna, arthropods 9714
  - forest litter, decomposition, soil fauna 6282
  - genetic variation, isoenzymes 565
  - logging, stand characteristics, damage, growth 7108
  - natural regeneration, seedbeds 6917
  - respiration 1271
  - root systems, slopes, erosion control 5839
  - thinning
    - ground vegetation, *Rubus palmatus,* growth 1391
    - landscape, aesthetic value, economics 8653
  - understorey, soil morphology, crusts, forest influences 9762
- *Chamaecyparis pisifera*
  - natural regeneration, forest ecology 4749

Japan *cont.*
- *Chamaecyparis pisifera cont.*
  - stand structure, light, natural regeneration, vegetative propagation 4801
- coniferous forests
  - acid deposition, chemistry, pH 5337
  - geographical information systems, geographical distribution 9931
- conifers
  - branches, wood strength, testing 4632
  - forest litter, decomposition, soil biology, Collembola 8799
  - growth models 1836
  - logging, forest roads, access 9603
  - mixtures, growth models 2700
  - runoff, streams, chemistry 1533
  - secondary forests, plant succession, age structure 4325
  - selection forests, crown, stand structure 4360, 6824
  - soil chemistry, nitrogen, mineralization 4487
  - stand characteristics, geographical distribution 4766
  - stand density, aerial photography 9637
  - stand structure
    - natural regeneration 2168
    - thinning, equations, growth 3479
  - stems, wind damage, shakes, distribution 9678
  - thinning, roads, economics 9522
  - understorey, light, crown, broadleaves 8064
  - woodland grasslands, improvement, cows 4959
- *Cryptomeria japonica*
  - breeding programmes 8192
  - canopy, stand structure, growth, plant morphology 6970
  - clones, genetic variation, wood chemistry 7341
  - crown
    - light 1777
      - simulation 1782
    - stems, growth 8698
  - forest influences, carbon cycle, soil chemistry 7047
  - genetic variation, wood properties 560
  - growth models, volume 6176
  - light, canopy, leaf area index 4468
  - natural layering, light, snow 4326
  - pollen
    - allergens, dispersion, simulation 7217
    - dispersal, temperature 4729
  - provenance, tree breeding, classification 7344
  - salt spray, topography, damage 4475
  - site preparation
    - slash
      - soil chemistry
        - ions 7045
        - nitrogen 4339
  - soil chemistry, cations 1094
  - stand density, increment 9536
  - stem form, volume, equations 4193
  - stems, wind damage, plant morphology 4479
  - thinning, crown, light, simulation 1773
  - tree breeding, selection criteria, inbreeding depression 9033
  - understorey, *Thujopsis dolabrata,* spatial distribution, stand characteristics 4327
  - vegetation, surveys, soil types 7279
  - wood anatomy, growth, wood properties 9793
- deciduous forests
  - acid deposition, chemistry, pH 5337
  - canopy, structure, aerial photography 6221
  - canopy gaps, soil water 4485
  - geographical information systems, geographical distribution 9931
  - islands, surveys 9938
  - plant succession
    - stand structure 6545

Japan *cont.*
- deciduous forests *cont.*
  - plant succession *cont.*
    - volcanoes 9016
- deer, *Cervus nippon, Fagus crenata,* natural regeneration, browsing damage 4054
- deforestation, suburban areas 9263
- *Fagus,* natural regeneration, stand structure, aspect 9001
- *Fagus crenata*
  - genetic variation, isoenzymes 2202
  - natural regeneration
    - canopy gaps, seed production, seed dispersal 6104
    - site preparation, *Sasa kurilensis,* control 4346
    - stand characteristics 8985
  - seed production, seed quality, variation 7213
  - seedlings, snow cover, natural regeneration, vertebrate pests 6252
  - seeds
    - phenology, meteorological factors 9879
    - snow cover, natural regeneration, vertebrate pests 6252
  - transpiration, stand characteristics, thinning 1927
  - understorey, simulation 3117
- forest economics, logging, labour 6850
- forest fragmentation, deciduous forests, forest ecology, *Bombus,* population dynamics 9947
- forest influences
  - hydrology, precipitation, runoff, statistics 7550
  - soil temperature, urban areas 357
- forest inventories, information processing, computer techniques 6993
- forest management
  - geographical information systems, work planning 6195
  - logging, planning 4418
  - planning, forest recreation 5193
  - simulation, methodology 2680
- forest plantations, dunes, plant colonization, *Quercus serrata* 2096
- forest roads
  - logging, silviculture 4419
  - planning 1018
    - methodology 7831
  - slopes, planning 6194
- forest soils, soil biology, microorganisms, biomass 7932
- forest trees
  - acid deposition
    - cycling
      - biomass, sulfur 6311
      - sulfur 6312
    - stemflow, soil chemistry 7999
  - dendrochronology, history 4139
  - essential oils, foliage, seasonal variation 6445
  - forest influences
    - carbon dioxide, plant physiology 7025
    - streams, chemistry 4599
  - humus, formation, volcanic soils 5261
  - light, photosynthesis, understorey 6255
  - roadside plantations, forest influences, air pollution 7126
  - root systems, slopes, stability 4600
  - selective felling, natural regeneration, stand development, logging effects 6910
  - soil air, carbon dioxide, snow cover 8768
  - stand structure, climax communities, spatial distribution 8157
  - stemflow, pH, soil chemistry, acidification 1992
  - tree breeding, genetics 1420
  - wind damage, topography, analysis 7035
  - woody weeds, plant succession, old fields, nature conservation 9019
- forestry, cooperatives, rural development, sociology 6847

Japan *cont.*
- forestry machinery, safety, visibility, measurement 962
- forests, understorey, geographical distribution, palaeoecology 1349
- fungal diseases
  - Basidiomycotina, *Larix leptolepis,* site factors, soil 6626
  - *Chloroscypha seaveri, Cryptomeria japonica,* ecology, pathogenicity 9116
  - *Colletotrichum dematium, Fagus crenata,* natural regeneration 4853
  - *Gibberella fujikuroi* var. *subglutinans, Pinus,* geographical distribution, pathogenicity 3166
  - *Gloeosporidina cryptomeriae, Cryptomeria japonica,* damage, symptoms 4864
  - *Irpicomyces cornicola, Cornus florida* 2252
  - *Larix leptolepis,* stems, damage 4858
  - *Lindera triloba,* Scolytidae, ecology, symbiosis 4887
  - *Phaeolus schweinitzii, Larix leptolepis,* damage 4857
  - *Seiridium unicorne, Chamaecyparis obtusa,* spread, damage 4865
  - *Uromyces truncicola, Sophora japonica* 2277, 5706
- fungi, species diversity, climax communities 3142
- *Ilex chinensis,* forest litter, nitrogen fixation 1943
- insect pests
  - *Acanthocinus griseus, Pinus,* biology 6655
  - *Adalia bipunctata, Rhaphiolepis umbellata* 5761
  - *Adelges japonicus, Picea jezoensis,* galls 5689
  - *Aphrophora paguma, Pinus luchuensis* 7434
  - *Aspidiotus cryptomeriae,* Gymnosperms 9144
  - *Callidiellum rufipenne, Cryptomeria japonica* 7466
  - *Cephalcia isshikii, Picea jezoensis,* damage, biology 4894
  - Cerambycidae, conifers, attractants 4040
  - *Chilocorus rubidus, Quercus aliena* 9168
  - *Cinara todocola, Abies sachalinensis,* forest plantations, spacing 633
  - *Curculio, Quercus,* parasitoids 658
  - Curculionidae, *Quercus crispula,* seeds, damage 10037
  - *Cyclophragma yamadai, Quercus acutissima,* biological control, nuclear polyhedrosis viruses 6650
  - *Heterarthrus alnivorus, Alnus matsumurae* 665
  - *Heterarthrus betulae, Betula ermanii* 665
  - *Heterarthrus subflavipes, Alnus maximowiczii* 665
  - *Ips typographus*
    - *Picea jezoensis*
      - logging, spread 7463
      - trapping, aggregation pheromones 4900
  - *Kaltenbachiella japonica, Ulmus davidiana,* biology 7437
  - *Lasioptera yadokariae,* broadleaves 7493
  - Lepidoptera, Fabaceae 5706
  - *Monochamus alternatus*
    - *Pinus*
      - biological control, entomogenous fungi 2377
      - laboratory rearing 10047
    - *Pinus densiflora,* biology 5755
    - *Pinus thunbergii,* control 7480
  - *Monochamus saltuarius, Pinus densiflora,* biology, seasonal behaviour 4888

Japan *cont.*
- insect pests *cont.*
  - *Periphyllus californiensis, Acer amoenum,* development, growth 4880
  - *Pseudoregma bambucicola,* bamboos, *Bambusa multiplex* 9145
  - *Quadricalcarifera punctatella*
    - *Fagus crenata* 7454
      - predators, population dynamics 9159
  - Scolytidae
    - *Lindera triloba*
      - fungal diseases, symbiosis 4887
      - symbionts 8339
  - *Semanotus japonicus, Cryptomeria japonica,* behaviour, ecology 2339
  - *Tetranychus quercivorus, Quercus crispula* 9178
  - *Thecodiplosis japonensis*
    - *Pinus* 5769
      - endophytes 8252
  - Tortricidae, *Quercus crispula,* seeds, damage 10037
  - *Xyleborus validus, Cryptomeria japonica* 7474
  - *Zethenia rufescentaria, Larix leptolepis,* natural enemies 9157
- labour, safety 7712
- landscape, urban areas, amenity trees 10157
- landslides, natural regeneration, seed dispersal, wind, altitude 3226
- *Larix leptolepis*
  - phenology, altitude 8889
  - wood anatomy, growth effects, site factors, spiral grain 7116
- *Lindera umbellata,* reproductive behaviour, sexual dimorphism 8950
- mites, *Panonychus citri, Ilex crenata,* habit, population dynamics 667
- mixed forests
  - botanical composition, topography, aspect 6274
  - clear strip felling
    - runoff
      - evapotranspiration 4931
      - logging effects 4934
- monkeys, *Macaca fuscata,* broadleaves, seed production 689
- mycoplasmal diseases, *Hovenia tomentosa,* damage 4874
- national parks, management, planning, administration 7603
- *Picea,* wood anatomy, palaeoecology 8990
- *Picea glehnii,* serpentine soils, nutrient uptake, nutrient deficiencies 7046
- *Picea jezoensis*
  - cuticle, bark, triterpenoids, chemotaxonomy 8083
  - stand structure, canopy gaps, understorey, growth 8659
- *Picea nakauchii,* palaeobotany, foliage, anatomy 5441
- *Pinus,* forest plantations, natural regeneration, site factors 7772
- *Pinus densiflora*
  - forest influences, soil fauna, arthropods 9714
  - plant succession
    - landscape, sociology 7292
    - soil chemistry, humus 7883
  - understorey 9944
- *Pinus pumila,* biomass production 4400
- *Pinus strobus,* forest litter, leaf fall, seasonal behaviour 7899
- *Pinus thunbergii*
  - crown, dimensions, fractal geometry 9339
  - diameter, increment 6973
  - fertilizers, sewage, nitrogen cycle, runoff 3413
  - genetic variation, isoenzymes, geographical distribution 4816
  - height, increment 6973
  - stand structure, multivariate analysis 9537

Japan *cont.*
- plant parasitic nematodes
  - *Bursaphelenchus, Pinus thunbergii,* cavitation 2372
  - *Bursaphelenchus xylophilus, Pinus thunbergii,* damage, wood anatomy 2373
- plant succession, grasslands, deciduous forests, natural regeneration, plant ecological groups 9005
- *Platycarya strobilacea*
  - bark, chemistry, tannins 6462
  - fruits, chemistry, tannins 6462
- pollen analysis 9915
- *Populus maximowiczii,* stem form, mechanics, seedlings 1231
- *Quercus*
  - forest influences, soil fauna, arthropods 9714
  - wood anatomy, palaeoecology 8990
- *Quercus crispula,* deciduous forests 7276
- *Quercus serrata*
  - coppice, forest fragmentation, biodiversity 8403
  - reproductive behaviour 2096
- rain forests, seedlings, development, allometry 2943
- road construction
  - costs, transport, analysis 2720
  - economics, analysis 9612
- root nodules, *Frankia, Alnus firma,* inoculation 4010
- *Salix matsudana,* plant water relations, site factors 3599
- *Sasa senanensis,* plant succession, old fields, understorey, species diversity 5463
- selection system, yield forecasting, forest management, planning 4411
- silvicultural systems, selection system, boreal forests 1735
- soil bacteria, insecticides, biodegradation 1925
- soil water movement, slopes, hydrology 8769
- subalpine forests
  - canopy gaps, natural regeneration 6523
  - flowering, phenology, insects 1304
- thinning, forest ownership, forest economics 7791
- *Thujopsis dolabrata*
  - natural regeneration, stand structure, history 3433
  - stem form, roots, snow damage, plant morphology 4631
- timbers, wood anatomy 5383
- vegetation types
  - multispectral imagery, reflectance, estimation 9633
  - soil types, altitude, mountain forests 9925
- wildlife, *Chamaecyparis obtusa,* browsing damage, fences, control 7529

Jasminum
- flora, checklists, South East Asia 7249
- taxonomy, South East Asia 7232

Jatropha curcas
- insect pests, *Spodoptera litura,* India, biology 640
- medicinal plants, Zaire 7808

Jeffersonioxylon gordonense
- palaeobotany, Antarctica 8072
- taxonomy, new taxa, wood anatomy, Antarctica 8072

Joannesia princeps, wood density, statistical analysis, growth effects 1179

Jordan
- *Acacia,* forest nurseries, irrigation, seedling growth 7767
- insect pests
  - *Matsucoccus josephi, Pinus,* geographical distribution 8330
  - *Pineus pini, Pinus,* geographical distribution 8330

Juglandaceae, phylogeny 3987

Juglans
- afforestation, agricultural land, forest economics, Italy 158

Juglans *cont.*
- agroforestry
  - afforestation, fields, France, research 7580
  - Corsica 5883
- assimilation, measurement, France, equipment 2487
- forest plantations, pastures, establishment, trials, France 5880
- fungal diseases, *Botryosphaeria ribis,* Italy 2273
- genetic diversity, molecular genetics, taxonomy 2223
- hybrids, inheritance, genetic markers 5529
- mistletoes, *Phoradendron macrophyllum* 6641

Juglans cinerea, mulches, herbicides, plant nutrition, Canada 5135

Juglans neotropica, choice of species, forestry development, South America, handbooks 2551

Juglans nigra
- afforestation
  - agricultural land, Italy 2632
  - mined land, reclaimed land, USA 9539
- agroforestry, soil water, microclimate, Canada 9278
- bark, thickness, fire resistance, USA 1197
- farm forestry
  - investment, economic analysis, USA, computer techniques 37
  - USA, investment, economic analysis, computer techniques 37
- forest plantations
  - economics, returns, USA 5212
  - weed control, herbicides, USA 172
- insect pests, *Conotrachelus retentus,* USA 9164
- linear plantations, water pollution, control, USA 9496
- multipurpose trees, tree breeding, NPK fertilizers, USA 9055
- provenance trials
  - genetics, USA 5059
  - USA 834
- seed orchards, genetic variation, isoenzymes, USA 5540
- seedlings, roots, Canada, morphology 9784
- site requirements, provenance trials, UK 2543
- species trials, forest plantations, grazing, France 5884
- weed control, USA, herbicides 8644

Juglans nigra* × *Juglans regia
- micropropagation, rooting, culture media, sucrose 5069
- vegetative propagation, histology, physiology, age 443

Juglans regia
- afforestation
  - agricultural land
    - forest economics, subsidies, Italy 159
    - Italy 2632
- agroforestry, France 5882
- bark, chemistry, esters 1253
- diameter, Italy, variation 2685
- fruits, chemistry, esters 1253
- genetic variation
  - isoenzymes 5546
    - foliage, Italy, morphology 5554
    - fruits, Italy, morphology 5554
- geographical distribution, silvicultural characters, plant morphology, Italy 6138
- hydraulic conductivity, roots 310
- insect pests, *Tribolium castaneum,* chemical control 5781
- phenotypic selection, genetic improvement, Italy 6031
- plant physiology, remote sensing 1038
- planting stock, treatment, UK, growth 5125
- pollen, storage, germination 2109
- seedlings, photosynthesis, carbon cycle 1257

Juglans regia *cont.*
- seeds, sowing, seedlings, morphology 8596
- site requirements, provenance trials, UK 2543
- tissue culture 862
- wood chemistry, esters 1253

Juglans regia* × *Juglans nigra
- explants, culture media, chemistry 2587
- tissue culture, somatic embryogenesis, cryopreservation 1698

Juglans sinensis, provenance, foliage, fruits, Korea Republic, morphology 9783

Julbernardia globiflora
- insect pests, Saturniidae, forest fires, Malawi 7452
- plant competition, savanna woodlands, Zimbabwe 4802
- savanna woodlands
  - biomass, Zimbabwe, estimation 6960
  - natural regeneration, soil chemistry, Zambia, charcoal 5239
  - phenology, plant nutrition, Zambia 6308
  - soil organic matter, Zimbabwe, forest litter, soil fertility 2812
  - stand structure, disturbance, soil properties, Zimbabwe 8156

Julbernardia paniculata, insect pests, Saturniidae, forest fires, Malawi 7452

Juniperus
- forests, synecology, Spain 8158
- fungal diseases, *Pithya cupressina,* Germany, damage 9113
- insect pests
  - *Cinara cupressi,* Malawi, biological control 8350
  - *Phloeosinus,* Austria 9167
- rangelands, erosion 7554
- runoff, erosion, USA 5837
- woodlands, erosion, remote sensing, USA 709

Juniperus angosturana, chemotaxonomy, random amplified polymorphic DNA, terpenoids 5430

Juniperus ashei
- gas exchange, seasonal variation, precipitation, USA 1263
- stand structure, stability, USA 550

Juniperus cedrus, embryo culture 7747

Juniperus chinensis
- foliage, chemistry, terpenoids 426
- street trees, microclimate, noise abatement, China 10156

Juniperus coahuilensis, chemotaxonomy, random amplified polymorphic DNA, terpenoids 5430

Juniperus communis
- air pollution, runoff, soil chemistry, Norway, nitric acid 5320
- chemotaxonomy, essential oils, Italy 6516
- fruits, edible species, cooking, palatability 1810
- insect pests, *Megastigmus bipunctatus,* Russia 664

Juniperus deppeana, dead wood, estimation, USA 4381

Juniperus erythrocarpa, chemotaxonomy, random amplified polymorphic DNA, terpenoids 5430

Juniperus flaccida, increment, variation, Mexico, mixed forests 226

Juniperus intermedia, chemotaxonomy, essential oils, Italy 6516

Juniperus monosperma
- chemotaxonomy, random amplified polymorphic DNA, terpenoids 5430
- dead wood, estimation, USA 4381

Juniperus occidentalis
- foliage, juvenility, plant physiology, USA 9791
- forest influences, soil chemistry, nutrients, USA 6372
- fungal diseases, *Heterobasidion annosum,* USA, spread 9095
- plant colonization
  - history, USA 6564
  - palaeoecology, USA 9917

Juniperus osteosperma
- mistletoes, *Phoradendron juniperinum,* plant physiology, USA 3800
- plant succession, grazing intensity, USA 2385
- plant water relations, plant nutrition, nitrogen, USA 4505

Juniperus oxycedrus
- goats, *Capra pyrenaica,* Spain 10058
- vegetation types, Spain 9007
- water stress, plant physiology, Spain 1114

Juniperus phoenicea
- essential oils
  - foliage, Italy 435
  - fruits, Italy 435
- forest fires, simulation, Portugal 7132
- goats, *Capra pyrenaica,* Spain 10058
- vegetation types, Spain 9007

Juniperus pinchotii
- chemotaxonomy, random amplified polymorphic DNA, terpenoids 5430
- forest influences, ground vegetation, soil types, USA 6556

Juniperus przewalskii, chemotaxonomy, China 3852

Juniperus recurva, cloud forests, synecology, altitude, land use, Nepal 1371

Juniperus sabina
- plant colonization, soil formation, Russia 1103
- shoot cuttings, landscape, Canada 6041

Juniperus scopulorum
- palaeoecology, USA 3893
- provenance trials, shelterbelts, USA 8562

Juniperus sibirica, chemotaxonomy, essential oils, Italy 6516

Juniperus thurifera
- birds, *Turdus,* seed dispersal, Spain 2387
- forest management, sustainability, Morocco 1015
- mammals, *Apodemus sylvaticus,* seed dispersal, Spain 2387

Juniperus virginiana
- dendrochronology, heartwood, acid deposition, USA 4141
- plant succession, old fields, site requirements 3102
- provenance trials, shelterbelts, USA 8562
- shoot cuttings, landscape, Canada 6041
- stand characteristics, sex ratio, Canada 549
- stems
  - mechanics 9797
  - roots, mechanics 9797
- weed control, USA, herbicides 8643

Juvenile wood
- *Abies alba,* wood anatomy 2017
- *Cryptomeria japonica,* distribution 7122
- *Picea abies,* wood anatomy, variation 2898

Juvenility, *Sequoia sempervirens,* vegetative propagation, grafting, plant composition, phosphoproteins 8922

Kadsura, taxonomy 8978

Kalmia angustifolia
- degraded forests, natural regeneration, remote sensing, Canada 7838
- detection, remote sensing, Canada 3512
- woody weeds, control, Canada 164

Kaltenbachiella japonica, insect pests, *Ulmus davidiana,* Japan, biology 7437

Kandelia candel
- mangrove forests, remote sensing, synecology, India 6996
- mangroves, salt tolerance, histology 9671
- plant morphology, growth, development 8063
- salt tolerance
  - seedling growth 4540
    - plant nutrition, copper, zinc 4539

Kazakhstan
- bacterial diseases
  - broadleaves, disease vectors, *Rhamnusium gracilicorne* 10019
  - *Ulmus* 10018
- forest decline, forest management 8945
- grazing, management, landscape ecology 4962
- insect pests
  - conifers, introduced species 10034

- **Kazakhstan** *cont.*
  - insect pests *cont.*
    - *Rhamnusium gracilicorne,* broadleaves, disease vectors, bacterial diseases 10019
  - palaeoecology 3891
  - *Pinus sylvestris,* roots, distribution, soil types, statistical analysis 6408
  - *Ulmus pumila,* shelterbelts, crop yield 8382
- ***Keilmeyera coriacea,*** tissue culture 5081
- **Kenya**
  - *Acacia*
    - seed banks 3962
    - synecology, site factors, variation, Arid Regions 8153
    - vegetation types, climate, landscape 2156
    - woodlands, synecology, ecotones 5443
  - *Acacia nilotica,* genetic variation, isoenzymes, population genetics 5550
  - *Acacia reficiens,* irrigated stands, biomass, equations 5960
  - *Acacia tortilis,* canopy, forest influences, understorey, grasslands 4601
  - *Acacia zanzibarica,* irrigated stands, biomass, equations 5960
  - afforestation, development projects, irrigation 5981
  - *Azadirachta indica*
    - multipurpose trees, indigenous knowledge 6384
    - seed collection, handling 2571
  - bottomland forests, stand characteristics, irrigation, projects 6574
  - *Brachylaena huillensis*
    - increment, diameter, age 998
    - phenology, reproductive behaviour 3833
  - browse, choice of species, indigenous knowledge, plant composition 6669
  - *Cassia siamea,* agroforestry, green manures, decomposition 5874
  - ethnobotany, riparian forests, stand characteristics 194
  - *Eucalyptus camaldulensis,* irrigated stands, volume determination, equations 5960
  - *Eucalyptus microtheca*
    - irrigated stands
      - provenance trials, plant physiology, plant water relations 6022
      - soil chemistry, nutrients 6371
  - *Eucalyptus tereticornis,* provenance trials, irrigated stands 6023
  - forest inventories, nature conservation, projects 2735-2749
  - forest management, land use, forest products industries, conflict 2718
  - forest resources, farm forestry, surveys 3250
  - forestry, Arid Regions, research, reviews 6000
  - forestry development, planning 4239
  - Forestry in irrigation schemes 5960, 5981, 6000-6001, 6010, 6021-6023, 6094, 6120, 6131, 6145, 6242, 6384, 6574, 6669
  - forests, nature conservation, development projects 5896
  - fuel plantations, irrigated stands, environmental protection, research, development projects 6001
  - insect pests
    - *Cinara cupressi*
      - *Cupressus lusitanica*
        - clones, resistance 1479
        - damage 7440
        - ecology 7445
  - *Leucaena,* variety trials 5060
  - *Leucaena leucocephala,* agroforestry, green manures, soil chemistry 3257
  - mangroves, broadleaves, foliage, chemistry 4676
- **Kenya** *cont.*
  - multipurpose trees
    - fuel plantations
      - irrigated stands
        - biomass production, water use efficiency 6021
        - stand density, increment 6131
  - *Prosopis juliflora*
    - coppice, management, irrigated stands 6094
    - fuel plantations
      - irrigated stands, economics 6242
      - spread, utilization, charcoal 6010
    - irrigated stands
      - biomass, equations 5960
      - biomass production, pods 6145
      - soil chemistry, nutrients 6371
    - multipurpose trees, indigenous knowledge 6384
  - *Sesbania keniensis,* seed collection 3993
  - *Sesbania sesban,* seed collection 3993
  - species trials, water harvesting, savanna woodlands, rehabilitation 6120
  - *Terminalia brownii*
    - forest plantations, water stress, irrigation 3611
    - irrigated stands, volume determination, equations 5960
- ***Keteleeria,*** wood anatomy, parenchyma 4625
- ***Keteleeria fortunei,*** fungal diseases, *Coccomyces keteleeriae,* China 2253
- **Keys**
  - Fabaceae, wood anatomy, phylogeny 8906
  - forest trees, wood anatomy, identification, West Africa 490
- ***Khaya,*** genetic variation, geographical distribution, genetic markers 5528
- ***Khaya anthoteca***
  - fungal diseases, Côte d'Ivoire, damage 6647
  - insect pests, Côte d'Ivoire, damage 6647
- ***Khaya anthotheca,*** forest plantations, silviculture, Côte d'Ivoire, growth, yield forecasting 4333
- ***Khaya grandifoliola***
  - forest plantations, silviculture, Côte d'Ivoire, growth, yield forecasting 4333
  - fungal diseases, Côte d'Ivoire, damage 6647
  - insect pests, Côte d'Ivoire, damage 6647
- ***Khaya ivorensis***
  - forest plantations, silviculture, Côte d'Ivoire, growth, yield forecasting 4333
  - fungal diseases, Côte d'Ivoire, damage 6647
  - insect pests, Côte d'Ivoire, damage 6647
- ***Khaya nyasica,*** forest plantations, agroforestry, sheep, Cuba 1556
- ***Khaya senegalensis***
  - forest plantations, agroforestry, sheep, Cuba 1556
  - fungal diseases, Côte d'Ivoire, damage 6647
  - insect pests, Côte d'Ivoire, damage 6647
- ***Kielmeyera coriacea,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- ***Kirramyces epicoccoides,*** fungal diseases, *Eucalyptus,* Madagascar, foliage 7403
- ***Knightia excelsa***
  - synecology, canopy gaps, natural regeneration, New Zealand 1413
  - wood anatomy, New Zealand 1213
- **Knots**
  - *Larix decidua,* pruning, wood properties, diameter, Poland 1983
  - *Pinus sylvestris,* pruning, wood properties, diameter, Poland 1983
- ***Koelreuteria paniculata,*** genetic variation, genetic markers, Korea Republic 8239
- ***Kokoona***
  - taxonomy
    - Sabah 7227
    - Sarawak 7227
- ***Koompassia malaccensis***
  - seedlings, identification, Indonesia 1324
  - wood chemistry, esters 1253
- ***Kopsia,*** chemotaxonomy, Asia 3846
- ***Kopsia profunda,*** plant composition, alkaloids 9825
- **Korea Democratic People's Republic**
  - *Larix olgensis,* stand characteristics, altitude 1817
  - mountain forests, synecology 3919
  - treelines, stand structure, botanical composition 8993
- **Korea Republic**
  - *Abies holophylla,* progeny testing, heritability 8205
  - *Alnus glutinosa,* provenance trials, growth, survival 7721
  - broadleaves, seeds 8573
  - conifers, pruning, equipment, work study 8657
  - deciduous forests, stand structure, classification 9008
  - *Dendropanax morbifera,* provenance, genetic variation, foliage, morphology 8238
  - edible fungi, understorey, control 7812
  - forest fires, fire danger, estimation 8878
  - forest roads
    - erosion 8727
    - road construction, durability, stability 8728
  - forest soils, acid deposition, simulation 8849
  - forest trees
    - degraded forests, forest decline, urban areas 9312
    - stumpage value 8748
  - *Forsythia viridissima,* ornamental woody plants 9310
  - insect pests
    - *Cryptorhynchus lapathi, Populus davidiana,* resistance, heritability 8326
    - *Endoclita excrescens, Populus davidiana,* resistance, heritability 8326
    - *Matsucoccus thunbergianae*
      - *Pinus thunbergii* 7441
        - monitoring, pheromone traps 5699
    - *Mecorhis ursulus, Quercus,* biology 9163
    - *Thecodiplosis japonensis, Pinus* 5769
  - *Juglans sinensis,* provenance, foliage, fruits, morphology 9783
  - *Koelreuteria paniculata,* genetic variation, genetic markers 8239
  - landslides, protection forests 9240
  - mites, woody plants, foliage, mutualism 3172
  - *Persea thunbergii,* foliage, seeds, provenance, variation 9978
  - pheasants, habitats 9223
  - *Picea abies,* provenance trials 6871
  - *Pinus densiflora*
    - plant succession, landscape, sociology 7292
    - progeny testing, genetic variation, genetic gain 8204
  - *Pinus koraiensis*
    - genetic variation
      - population genetics, isoenzymes 2192
      - seeds, seedlings 8203
    - selection criteria, site factors 8206
    - thinning, planting, growth 8656
  - plant parasitic nematodes, *Bursaphelenchus xylophilus, Pinus,* pathogenicity, control 8346
  - *Quercus rubra,* provenance trials, growth, survival 7720
  - *Robinia pseudoacacia*
    - intensive silviculture
      - pulpwood production, biomass production 8710
      - stand density, biomass production 8709
  - soil classification 5265-5266
  - thematic mapper, stand characteristics, topography 8742
  - urban forestry, secondary forests 9311
  - vegetation types, plant succession, national parks 9302
- ***Korthalsia furtadoana,*** canes and rattans, species diversity, reproductive behaviour, Sabah 2013

- ***Kunzea ambigua,*** seeds, forest fires, Australia, insulation 2100
- ***Kunzea ericoides***
  - erosion control, New Zealand 4942
  - essential oils, New Zealand 1806
  - stand structure
    - population dynamics
      - dunes, New Zealand 4782
      - heathlands, New Zealand 4782
  - synecology, canopy gaps, natural regeneration, New Zealand 1413
  - taxonomy, New Zealand 499
  - wood anatomy 2939
- ***Kunzea recurva,*** seed germination, temperature 76
- ***Kunzea sinclairii***
  - taxonomy, New Zealand 499
  - wood anatomy 2939
- ***Kunzea sinclairii* × *Leptospermum scoparium***
  - taxonomy, New Zealand 499
  - wood anatomy 2939
- **Kuwait,** medicinal plants, books 3295
- ***Kydia calycina,*** seed germination, seed treatment, temperature 81
- **Labour**
  - forest economics
    - income, assessment, equations 3360
    - logging, Japan 6850
  - forestry
    - Netherlands, Lyme disease 55
    - safety, ergonomics 822
    - USA 56
  - safety, Japan 7712
- ***Laburnum alpinum,*** root nodules, nitrogen fertilizers, seedling growth 5288
- **Lac,** multipurpose trees, agroforestry, China 978
- ***Laccaria amethystea***
  - mycorrhizas
    - forest trees, chemistry 8274
    - *Larix decidua,* plant composition, phenolic compounds 6623
- ***Laccaria bicolor***
  - mycorrhizas
    - *Pinus pinaster,* planting stock, forest soils, bioassays 5574
    - *Pinus ponderosa,* roots, translocation 4004
    - *Pinus strobus,* photosynthesis 4849
    - *Pinus sylvestris*
      - Netherlands 9074
      - plant growth regulators, plant nutrition 3159
    - *Pseudotsuga menziesii*
      - colonization 9072
      - forest litter, decomposition 4005
      - forest nurseries, persistence 5595
  - population genetics, mycorrhizas, forest trees, USA 9997
- ***Laccaria fraterna,*** mycorrhizas, *Acacia nilotica,* seedling growth 8267
- ***Laccaria laccata***
  - mycorrhizas
    - *Cistus ladanifer* 9083
    - *Leucaena leucocephala,* seedling growth, plant physiology, plant nutrition 596
    - *Picea abies*
      - France, inoculation methods 4008
      - seedlings, photosynthesis, seasonal variation 2249
    - *Pinus,* radionuclides, uptake 4007
    - *Pinus patula,* forest nurseries, seedling growth 4850
    - *Pinus ponderosa,* forest nurseries, Argentina 4009
    - *Pinus sylvestris*
      - development
        - seedlings
          - *Frankia* 7388
          - soil bacteria 7388
      - heavy metals, toxicity 5601
    - *Pseudotsuga menziesii*
      - enzymes, nitrogen, metabolism 5577
      - forest nurseries, France, assessment 9992
    - *Quercus robur,* carbon dioxide enrichment 5582
- ***Laccaria proxima***
  - mycorrhizas
    - *Picea sitchensis,* fertilizers, forest nurseries, UK 906
    - *Pinus sylvestris,* foliage, extracts, allelopathy 2245
- ***Lachnellula pini,*** fungal diseases, conifers 4169
- ***Lachnellula willkommii*** (*see Trichoscyphella willkommii*)
- ***Lacistema aggregatum,*** hydraulic conductivity, roots 310
- ***Lactarius,*** mycorrhizas, conifers, host specificity 5572
- ***Lactarius blennius,*** ectomycorrhizas, *Fagus sylvatica,* France, morphology 5578
- ***Lactarius deliciosus,*** mycorrhizas, *Pinus halepensis* 8285
- ***Lactarius deterrimus,*** mycorrhizas, *Picea abies,* induction, cell culture, callus 8258
- ***Lactarius lignyotus,*** mycorrhizas, *Picea abies* 5614
- ***Lactarius piperatus,*** mycorrhizas, *Picea abies,* seedlings, photosynthesis, seasonal variation 2249
- ***Lactarius rufus,*** mycorrhizas, *Pinus contorta,* competition 8271
- ***Lactarius subdulcis,*** ectomycorrhizas, *Fagus sylvatica,* France, morphology 5578
- ***Laetia procera,*** root systems, morphology, development 7164
- ***Laetiporus sulphureus,*** fungal diseases, Slovakia, spore dispersal 5630
- ***Lafoensia pacari,*** cerrado, synecology, phenology, Brazil 8995
- ***Lagerstroemia indica***
  - container grown plants, irrigation, USA 6756
  - insect pests
    - *Homalodisca coagulata,* biology 8329
    - *Sarucallis kahawaluokalani,* USA, control 2375
- ***Lagerstroemia* 'Muskogee',** mulching, cover crops, USA 5113
- ***Lagerstroemia parviflora,*** cuttings, India 1718
- ***Lagerstroemia speciosa,*** progeny testing, genetic variation, India 9057
- ***Laguncularia,*** palaeobotany, America, reviews 6528
- ***Laguncularia racemosa***
  - epiphytes, Cyanobacteria, nitrogen fixation, Guadeloupe 537
  - mangroves, geographical distribution, Mexico 7264
  - natural regeneration, recruitment, environmental factors, Belize 6575
  - seedling growth, nutrient availability, light intensity 5386
  - shoots, Guinea, growth, morphology 9782
  - vegetation types, America 6548
- ***Lambdina fervidaria,*** insect pests, *Tsuga canadensis,* USA 2330
- ***Lambdina fiscellaria***
  - insect pests
    - biological control, parasitoids 9193
    - expert systems, control 5022
    - *Tsuga canadensis,* Canada, pheromones 5705
- **Lammas growth,** *Pseudotsuga menziesii,* genetic variation, drought, adaptation 4654
- **Land classification**
  - boreal forests, soil, mapping, Russia 5210
  - forest ecology, Austria 9640
  - forest management
    - Canada 255, 257
      - information needs 254
    - USA, conferences 2469
  - forests
    - Canada 249-250, 256
      - forest ecology, forest inventories 253
      - forest inventories 252
    - forest management, Canada, forest ecology 251
  - geographical information systems, forest ownership, USA 6235
- **Land classification** *cont.*
  - South Africa 7876
  - steppes, soil, mapping, Russia 5210
- **Land clearance** (*see also* Site preparation)
  - deforestation, soil properties, Bolivia 8006
  - planning, history, Germany 4235
- **Land development,** woody plants, oilseed plants, choice of species, India 1657
- **Land evaluation,** farm forestry, Sweden, mathematical models 6243
- **Land reclamation** (*see* Reclamation)
- **Land use**
  - abandoned land, *Populus,* short rotation forestry, Italy 6136
  - afforestation
    - agricultural land, France 9253
    - forest management, UK 6204
  - agricultural land
    - afforestation, France 1544
    - *Populus,* farm forestry, Italy, economics 6245
  - agroforestry
    - development, policy, research 10096
    - Italy 9271
    - Tropics 9279
  - biodiversity, nature conservation 7565
  - birds
    - ecology, hedges, UK, species diversity 8369, 8372
    - forestry, UK, species diversity 6689
  - boreal forests, climatic change, Canada, socioeconomics 8540
  - cattle farming, deforestation, Central America 8416
  - cerrado, flora, utilization, Brazil 2147
  - change
    - agroforestry, Temperate Zones, Industrial Countries, conferences 9324
    - environmental impact, logging, USA 7688
    - landscape, Czech Republic 8452
    - remote sensing
      - multispectral imagery
        - Brazil 7843
        - vegetation
          - Brazil 9630
          - Mali 9630
          - USA 9630
      - statistical analysis 261
  - classification, remote sensing, satellites, databases, New Zealand 8400
  - cloud forests, synecology, altitude, Nepal 1371
  - conflict
    - agroforestry, development, rehabilitation, Venezuela 6727
    - logging, control, Indonesia 1543
  - coniferous forests, synecology, USA, history 2408
  - deciduous forests, synecology, USA, history 2408
  - deforestation
    - erosion, Tanzania 3249
    - fuelwood, Ghana 3362
    - India 721
    - plant succession, soil properties, Costa Rica 2154
    - sustainability, Brazil 720
  - fallow
    - short rotation forestry
      - France
        - *Eucalyptus* 6101
        - *Populus* 6101
  - farm forestry
    - East Africa, books 4166
    - East Asia, books 4166
  - forest ecology, species diversity, plant succession, USA 5461
  - forest management
    - forest products industries, Kenya, conflict 2718
    - sustainability, Sahel, reviews 7830
  - forest ownership, nature conservation, Australia 6713
  - forest resources
    - deforestation, forest management, Chile 5989
    - forest management, Guinea 5033

Land use *cont.*
- forest resources *cont.*
  - natural regeneration, South East Asia 5034
- forest trees
  - hedges, Guinea 9242
  - seed dispersal, global warming, simulation 480
- forestry
  - nature conservation 7586
    - history, Guinea 8537
  - Temperate Zones 1545
  - Tropics 1545
- forestry development
  - ecology, India 1629
  - sustainability, agroforestry, indigenous knowledge, Vanuatu 9255
- forests
  - deforestation, history, Pakistan 5859
  - environmental degradation, nature conservation, Sri Lanka 1578
- global warming, books 8
- hydrology, agroforestry, Indonesia 2397
- integrated systems, agroforestry, greenhouse effect, climatic change 2795
- land classification, environmental protection, Italy 715
- landscape ecology
  - conservation, Sri Lanka, conferences 768
  - fragmentation, forest plantations, Spain 3871
- mapping, forest ownership, forest management, Indonesia 2758
- multiple land use, forests, forest plantations, species diversity, Spain 8407
- multiple use
  - Australia 8408
  - Europe, conferences 6804
  - forest policy, USA, simulation 2515
  - forestry, education 5998
  - simulation, Canada 9258
- multipurpose trees, agroforestry, Côte d'Ivoire 8423
- national parks
  - Italy 8481
  - remote sensing, Landsat, Spain 6751
- nature conservation, forest management, sustainability, climatic change, conferences 19
- nitrogen cycle, Brazil 8826
- periodicals 7617
- planning
  - fuelwood, resources, forest management, South Africa 4253
  - geographical information systems, New Zealand 8401
  - USA 8405
- policy, afforestation, agricultural land, UK 7694
- projections, USA 2728
- rain forests, sustainability, biodiversity, Brazil 3352
- remote sensing
  - deforestation, Thailand 7852
  - image interpretation, UK 4447
  - Italy, geographical information systems 8734
  - multispectral imagery, Spain 1863
  - Netherlands 5207-5208
  - plant succession, Sweden 8404
  - radar, Belize 1864
  - radiometry
    - Canada 1861
    - mapping 7010
  - satellites, India 3513
  - thematic mapper, statistical analysis 7841
  - tropical forests, area, estimation 9634
  - urban areas, USA 6239
  - USSR 5209
- savanna woodlands, agroforestry, West Africa, classification 9927
- savannas
  - agroforestry, West Africa, classification 9927
  - synecology, Zimbabwe 6549
- sewage sludge, disposal, environmental impact, USA, simulation 5855
- shifting cultivation, Africa, Tropics 9265

Land use *cont.*
- soil degradation, hill land, shifting cultivation, deforestation, India 10087
- sustainability
  - agroforestry
    - Spain 1561
    - Sri Lanka 3270
  - economics, books 8475
  - forest economics 5856
  - mountain forests, erosion, India 9254
  - shifting cultivation, carbon cycle, Tropics, reviews 8427
  - water resources, deforestation, South East Asia 707
- tropical forests
  - deforestation, natural regeneration 1415
  - remote sensing, radar, forest resources 262
- *Tsuga canadensis*, forest ecology, USA, history 717
- upland areas, deforestation, history, Philippines 8402
- urban forestry, USA, methodology 4138
- vegetation, population dynamics, USA, history 716
- vegetation types
  - carbon balance, Brazil, estimation 9734
  - carbon cycle, Brazil, estimation 9735
  - mapping, UK, change 8735
- water resources, Italy 705
- wilderness, Canada, economic evaluation, simulation 1872
- woodlands
  - afforestation, UK, books 6776
  - synecology, Zimbabwe 6549

Land use planning
- agroforestry, development, Liberia 1562
- fire prevention, France, Mediterranean Region, books 7621
- forest management, forest policy, Italy 6208
- geographical information systems, USA, social behaviour 8399
- grazing, USA, fishes, freshwater ecology 8357
- legislation, Italy, mountain areas 6714
- management, agroforestry, Sahel 1547
- multiple land use, biodiversity, conservation, Germany, techniques 8450
- national forests, UK, multiple use 6748
- nature conservation, urban areas, Canada 8439
- *Pinus halepensis*, agroforestry, rural economy, forestry development 8424
- savanna woodlands, deforestation, development projects, Cameroon 4952
- shelterbelts, China 2403
- tribes, agroforestry, USA 8406

Landfills
- broadleaves
  - reclamation
    - species trials
      - plant nutrition, UK 4948
      - UK 4947
- reclamation, classification, UK 6710

Landings, boreal forests, soil compaction, tillage, Canada 1089

Landscape
- *Acacia*, vegetation types, climate, Kenya 2156
- *Acacia aneura*, woodlands, soil chemistry, Australia 9002
- biodiversity, USA, analysis 3283
- birds
  - Corvidae, Sweden, behaviour, predation 694
  - parasitism, clear felling, USA 6911
- boreal forests, forest management, Russia 5195
- *Chamaecyparis obtusa*, thinning, Japan, aesthetic value, economics 8653
- clear felling, USA 6754
- coniferous forests, clear felling, USA 4132
- exotics, Italy, forest management, aesthetic value 9608
- forest management
  - forest recreation, Denmark 1583

Landscape *cont.*
- forest management *cont.*
  - multiple use, books 8470
  - USA 4133
    - public opinion 1646
- forest recreation, USA, consumer preferences 2427
- forest resources, amenity trees, plant genetic resources 2433
- forest trees, forest fragmentation, USA 7280
- forestry, Europe, periodicals 743
- forests
  - Canada, land use, change 6753
  - fire suppression, USA, settlement 383
  - history, UK 5903
  - simulation, Canada 4097
- fragmentation, wildlife, forest ecology, Australia, conferences 766
- Germany 4231
- history
  - geographical information systems, Switzerland, analysis 2431
  - maps, Germany 8525
- land use, change, Czech Republic 8452
- logging, USA, assessment 4977
- management, urban sites, books 4145
- maps, USA, multivariate analysis 8736
- mountain areas, remote sensing, Italy, methodology 6715
- old-growth forests, disturbance, plant succession, USA 6568
- ornamental woody plants, shoot cuttings, Canada 6041
- perception
  - afforestation, agricultural land, mountain areas, Switzerland 8451
  - forest recreation, USA 5900
  - plant succession, old fields, mountain areas, Switzerland 8451
- *Pinus densiflora*
  - plant succession
    - sociology
      - Japan 7292
      - Korea Republic 7292
- planting, design, books 6752
- policy, hedges, France 5846
- *Populus*, water management, USA 7549
- private forestry, amenity value of forests, Finland, methodology 10136
- *Quercus*, remote sensing, France 3508
- reclamation, polluted soils, Italy 3247
- stand characteristics, sampling, USA, variation 2166
- urban areas, amenity trees, Japan 10157
- urban forestry, environment, South Africa 739

Landscape ecology
- *Acer saccharum*, vegetation types, Canada 3910
- boreal forests, old-growth forests, forest fires, frequency 10137
- fire suppression, simulation, USA 4131
- forest borders, Canada, species diversity 4747
- forest management, biodiversity, USA 4130
- fragmentation, land use, forest plantations, Spain 3871
- grazing, management, Kazakhstan 4962
- land use, conservation, Sri Lanka, conferences 768
- national parks, Italy 6750
- *Pinus contorta*
  - cones, fire effects, USA 1200
  - fire effects, natural regeneration, USA 1200
- relief, Germany 7042
- tropical forests, remote sensing, Guatemala 6997
- vegetation, classification 9341
- virgin forests, forest fragmentation, USA 1587

Landslides
- broadleaves, plant colonization, Jamaica 4793
- deciduous forests, New Zealand 4940
- forest trees, ferns, plant succession, plant competition, Puerto Rico 3872
- logging, storms, USA, simulation 9768

Landslides *cont.*
 natural regeneration, seed dispersal, wind, altitude, Japan 3226
 Pinus radiata, forest plantations, New Zealand 4940
 plant colonization, Jamaica 6563
 protection forests
  France, surveys 10089
  Korea Republic 9240
 risk, protection forests, Switzerland 10088
 slopes, soil movement 1896
 vegetation, Puerto Rico, spatial variation, site factors 9767
Lanius collurio, birds, woody plants, Spain, ecology 8373
Lanius excubitor, birds, woody plants, Spain, ecology 8373
Lanius senator, birds, woody plants, Spain, ecology 8373
Lannea alata, browse, indigenous knowledge, Kenya 6669
Lannea coromandelica
 energy value, seasonal variation, India 2541
 foliage
  plant water relations, biomass production, India 8821
  sugars, photosynthesis 6485
 increment, fertilizers, plant products, pot experimentation 133
Lantana camara
 biomass production, cycling, India 3864
 scrub, biomass production, cycling, India 3254
 woody weeds
  rain forests, Australia 2647
  savanna woodlands, Australia 2647
Lao
 agroforestry, development, planning 3271
 deforestation, land use, sustainability, water resources 707
 forestry, development projects, afforestation 5032
 Styrax tonkinensis, silviculture 2662
 Tectona grandis, farm forestry 8409
Laplacea subintegerrima, wood chemistry, Indonesia 6448
Larix
 agroforestry, afforestation, fields, France, research 7580
 choice of species, afforestation, altitude, France 9421
 fertilizers, irrigation, soil chemistry, Poland 137
 forest plantations, agroforestry, France, research 7580
 fungal diseases, *Gremmeniella abietina* 4169
 insect pests, *Dendrolimus superans,* Russia, biology 644
 micropropagation, culture media 122
 mixtures, stand structure, Germany 9581
 nomenclature, Russia 8979
 palaeobotany, Russia 3890
 plant nutrition 2850
 provenance, bark, monoterpenes, variation, Poland 1428
 seed germination, water stress 9426
 silvicultural conversion, mixtures, Austria 6940
 silviculture, Germany, conferences 5940
 species trials, provenance trials, Poland 827
 tree breeding
  Germany 4230
  progeny testing, Russia 5492
 wood anatomy
  identification 495
  parenchyma 4625
Larix czekanowskii, increment, diameter, climate, Russia 9592
Larix dahurica (*see Larix gmelinii*)
Larix decidua
 afforestation
  soil chemistry, UK 5353
  treelines, dendrochronology, dieback, Switzerland 6762
 air pollution, increment, dendrochronology, Poland 7612
Larix decidua *cont.*
 altitude, stomata, Austria, ozone, uptake 7187
 bark, chemistry, esters 1253
 broadleaves, natural regeneration, soil chemistry, Germany 8660
 bud culture, micropropagation 4289
 chloroplast genetics, taxonomy 6585
 choice of species, protection forests, avalanches, Germany 6869
 chromosomes, cytotaxonomy 8224
 flowering
  induction
   plant growth regulators, gibberellins 8952
   seed orchards, Germany 6511
 forest borders, air pollution, deposition, Netherlands 6345
 forest plantations
  France, history 2638
  silviculture, grazing, France 5876
 forest resources, forest management, Italy, stand characteristics, landscape 9540
 fungal diseases, *Trichoscyphella willkommii,* resistance, testing 5642
 genetic transformation, insect pests, herbicides, resistance 4834
 hybrids, seed orchards, Finland 3976
 inbreeding, Poland 7209
 insect pests, *Ips cembrae,* Germany, resistance 2344
 Larix leptolepis, hybrids, genetics, Germany 3129
 light, diameter, Italy, growth effects 6362
 micropropagation, rooting capacity 123
 mixtures
  forest plantations, Ukraine 1783
  mountain forests, Germany 948
 mycorrhizas, *Laccaria amethystea,* plant composition, phenolic compounds 6623
 nurse trees, UK, *Quercus robur* 5155
 phenology, climatic change, Europe 4618
 photosynthesis, acid deposition, plant growth regulators, benzyladenine 462
 plant morphology, habit, taxonomy, Poland 1322
 plant water relations, Italy 3615
 pollen, amino acids, Slovakia 3750
 pruning, knots, wood properties, diameter, Poland 1983
 seedlings, photosynthesis, light, enzymes 458
 shoots, morphology 2934
 site class assessment, soil texture, USA, methodology 1842
 somatic embryogenesis, protoplasts 121
 spacing, stand development, Germany 8660
 stand characteristics, plant competition, yield tables, simulation 6827
 stems
  Canada, major elements, distribution 4666
  nutrients, distribution, Canada 5291
 tissue culture, ploidy 7359
 vegetative propagation, shoot cuttings, grafting, tissue culture, shoot tip culture 4280
 volume determination, remote sensing 1034
 watersheds, hydrology, UK, research 702
 wildlife, birds, New Zealand 6670
 wood anatomy, reaction wood 2016
 wood chemistry, esters 1253
Larix decidua × Larix leptolepis, air pollution, increment, dendrochronology, Poland 7612
Larix eurolepis
 agroforestry, sheep, birds, ecology, UK 6725
 chromosomes, cytotaxonomy 8224
 genetic variation, shoot cuttings, rooting capacity, France 570
 micropropagation, rooting capacity 123
 mitochondrial genetics
  nucleic acids, purification, somatic embryogenesis 9032
  somatic embryogenesis 573
Larix eurolepis *cont.*
 progeny testing, USA 4254
 shoot cuttings, techniques 2586
 somatic embryogenesis
  culture media, abscisic acid 2584
  development, cell division, microtubules 2601
  water stress 6894
 tissue culture, somatic embryogenesis, micropropagation, plant growth regulators, abscisic acid 3401
Larix gmelinii
 afforestation, trials, international cooperation, Russia 9502
 birds, *Tetrao parvirostris,* Russia, feeding behaviour 8360
 chloroplast genetics, taxonomy 6585
 dendroclimatology, Russia 3289
 firebreaks, Russia, silviculture 2914
 forest plantations, nitrogen cycle, China 7964
 mensuration, Russia, statistical analysis 2681
 wood anatomy, wood properties 7153
Larix kaempferi (*see Larix leptolepis*)
Larix laricina
 buds, flowering, gibberellins, plant development 9848
 cambium, plant development, biochemistry 9786
 chloroplast genetics, taxonomy 6585
 drought resistance, winter, USA 1931
 endophytes, Canada 6607
 insect pests
  Pristiphora erichsonii
   dendrochronology
    Canada 5764
     introduced species 1486
 lignification, enzyme activity 1275
 molecular genetics, biochemistry, ribulose-bisphosphate carboxylase, light 3981
 nitrogen fertilizers
  peat soils
   Canada
    distribution 3411
    uptake 3410
 provenance trials, site factors, waterlogging, France 4257
 seed orchards, pollen, contamination, Canada 4269
 stems
  Canada, major elements, distribution 4666
  nutrients, distribution, Canada 5291
Larix leptolepis
 carbon dioxide enrichment, air pollution, ozone, seedling growth 2874
 chloroplast genetics, taxonomy 6585
 chromosomes, cytotaxonomy 8224
 flowering, induction, plant growth regulators, gibberellins 8952
 forest influences, nutrients, distribution, Sweden 7129
 forest nurseries, herbicides, UK, tolerance 2644
 forest plantations, silviculture, grazing, France 5876
 fungal diseases
  Basidiomycotina, Japan, site factors, soil 6626
  biology 2260
  Phaeolus schweinitzii, Japan, damage 4857
  stems, Japan, damage 4858
 herbicides, UK, tolerance 2645
 insect pests, *Zethenia rufescentaria,* Japan, natural enemies 9157
 Larix decidua, hybrids, genetics, Germany 3129
 mixtures
  growth models, Japan 2700
  increment, Germany 9593
 phenology, altitude, Japan 8889
 progeny testing, USA 4254
 roots, frost resistance, planting stock, cold storage 3558
 seed orchards, pollen, maturation, temperature, Canada 6038
 seedlings, frost resistance, development, photosynthesis, light 9663

***Larix leptolepis* cont.**
- species trials, forest plantations, grazing, France 5884
- stand density, aerial photography, Japan 9637
- stems, growth models 1820
- thinning, photointerpretation, stand structure, equations 8655
- wind damage, Netherlands 1062
- wood anatomy, Japan, growth effects, site factors, spiral grain 7116
- woodland grasslands, improvement, Japan, cows 4959

Larix lyallii
- chloroplast genetics, taxonomy 6585
- dendrochronology, treelines, Canada 10162
- dendroclimatology, increment, climate, USA 4990
- hybrids, seed germination, seedling growth, USA 1432

Larix occidentalis
- advance growth, liberation felling, USA 2627
- chloroplast genetics, taxonomy 6585
- fungal diseases, *Melampsora medusae,* USA 5659
- height classes, USA 229
- hybrids, seed germination, seedling growth, USA 1432
- insect pests, *Coleophora laricella,* Canada 638
- plant succession, seral stages, increment, USA 4792
- plant water relations, altitude, isotope fractionation 2834
- pollination, seed development, seed production 1319
- pruning, work study, economics 6139
- roots, development, methodology 5009
- seed germination, seed treatment 848
- water use efficiency, genetic variation, USA, growth 1274

Larix olgensis
- forest plantations, peatlands, thinning, China, growth 8652
- provenance trials, wood properties, China 4583
- stand characteristics, altitude, Korea Democratic People's Republic 1817
- stand density, natural thinning, growth models 9538

Larix potaninii, chloroplast genetics, taxonomy 6585

Larix sibirica
- boreal forests, natural regeneration, Russia, simulation, management 9965
- carbon dioxide enrichment, air pollution, ozone, seedling growth 2874
- chloroplast genetics, taxonomy 6585
- chromosomes, isoenzymes, taxonomy 4746
- clear felling, natural regeneration, biomass production, Russia 9494
- dendrochronology, Russia 4992
- forest influences, soil chemistry, USA 8791
- frost resistance, roots, Russia 279
- genetic variation, seed germination 8202
- geographical distribution, Russia 6536
- hybrids, seed orchards, Finland 3976
- increment, diameter, climate, Russia 9592
- mixtures
  - *Betula pendula,* root systems, plant competition, Russia 2656
  - *Picea abies,* root systems, plant competition, Russia 2656
  - *Pinus sylvestris,* root systems, plant competition, Russia 2656
- reclamation, Russia 3228
- seeds, mechanical properties, testing 405
- wood properties, growth effects, Russia 9756

Larix sukaczewii
- chromosomes, isoenzymes, taxonomy 4746
- forest health, Russia, experimental plots 5419
- genetic variation, isoenzymes, Russia 5495

Lasiodiplodia, fungal diseases, *Prosopis,* USA 10003

Lasioptera yadokariae, insect pests, broadleaves, Japan 7493

Latewood, *Quercus robur,* earlywood, cellulose, metabolism, UK 9853

Latex, *Euphorbia tanquahuete,* Mexico, terpenoids, steroids 1242

Laticifers, *Calotropis procera,* cell differentiation 7162

Latin America
- *Acacia,* taxonomy 4745
- *Alnus acuminata,* chromosome number 2222
- *Alnus jorullensis,* chromosome number 2222
- bamboos, ethnobotany, reviews 9562
- community forestry
  - development projects, management, sustainability 2424
  - forest management, resource management, bibliographies 6795
- forest management, sustainability, environmental protection, books 7632
- history, tropical forests, books 4150
- Malpighiaceae, new species 9906
- *Ormosia,* chemotaxonomy, alkaloids 4742
- *Petrea,* taxonomy 3046
- private forestry, forest management, sustainability, economics 5219
- rain forests
  - monkeys, hunting, nature conservation 5815
  - women, forest policy 7630
- tropical forests
  - forest management
    - sustainability, indigenous knowledge 7690
    - tenure systems, community forestry 3494

Latitude
- coniferous forests, botanical composition, altitude, USA 4770
- mangrove forests, biomass production, forest litter, Tropics 3899
- *Pinus sylvestris*
  - frost resistance, altitude, Sweden 5233
  - seed orchards, Finland 7731

Latvia
- *Alnus glutinosa,* swamps, peatlands, synecology 1381
- boreal forests, peatlands, phytogeography 8155
- conifers, isoenzymes, gene mapping 9044
- *Picea abies*
  - genetic variation
    - alloenzymes 7342
    - isoenzymes 7347
- *Pinus sylvestris,* genetic variation, isoenzymes, gene flow 571

Lauraceae
- flowers, stamens, evolution 4837
- rain forests, species diversity, forest litter, measurement, Sabah 2823

Laurales, flowers, stamens, evolution 4837

Laurelia philippiana
- assortments, Chile, secondary forests 992
- rain forests, seed size, recruitment, Chile 7258

Lauritrioza alacris, insect pests, *Laurus nobilis,* Albania, control 5807

Laurus azorica
- silvicultural characters, Canary Islands 8888
- species trials, rehabilitation, Canary Islands 6032

Laurus nobilis
- bacterial diseases, *Pseudomonas syringae,* Italy 613
- insect pests
  - *Aonidia lauri,* Italy, life cycle 9140
  - *Lauritrioza alacris,* Albania, control 5807

Lavandula latifolia, sclerophyllous scrub, habit, Spain 3705

Lawsonia inermis
- browse, indigenous knowledge, Kenya 6669
- flowers, volatile compounds 9803

Leaves (*see* Foliage)

Lebanon
- insect pests
  - *Matsucoccus josephi, Pinus,* geographical distribution 8330
  - *Pineus pini, Pinus,* geographical distribution 8330

Lecanosticta acicola (*see Mycosphaerella dearnessii)*

Lecythis ampla, increment, diameter, Costa Rica, variation, climate 1841

Ledum palustre, nature conservation, Poland 1576

Legal rights, forest ownership, Russia 8751

Legislation
- edible fungi, Italy 6157
- environmental impact, Switzerland 50
- fertilizers, sewage sludge 8593
- forest economics
  - forest policy
    - Albania 2528
    - Poland 2528
- forest management
  - conservation, India, tribal society, right of access 5993
  - forestry, Spain 1636
- forest policy 3354
  - forest management, economics, forest administration, Russia 9386
  - Switzerland 42
- forest trees, tree breeding, European Union 3966
- forestry 2529
  - conservation, India 1637
  - erosion, water pollution, USA 4938
  - India 819
  - nature conservation 7591
  - Russia 4244
  - waste disposal, UK 2892
  - wildlife, Peru 818
- fuelwood, utilization, energy policy, forestry, Uruguay 8551
- insect pests, Scolytidae, UK, surveys 3184
- land use planning, Italy, mountain areas 6714
- private forestry, USA 2530, 6854-6856
- refuse tips, Germany, European Union 9401
- regulation, forest administration, Peninsular Malaysia 6858
- soil pollution, heavy metals, compensation, Germany 7922
- valuation, taxes, Germany 9657

Lentinula edodes, edible fungi, insect pests, *Dacne japonica,* Japan 2340

Leopards, mammals, *Acacia,* South Africa 3206

Lepechinia fragrans, foliage, respiration, light, dark, habit 6474

Lepidomyctides nagaii, insect pests, *Bambusa multiplex,* South East Asia 7465

Lepidoptera
- insect pests
  - *Betula,* Canada, behaviour 5716
  - conifers
    - defoliation, Canada 4047
    - foliage, terpenoids, Canada 9146
  - *Eucalyptus,* Brazil 5713
  - *Eucalyptus urophylla,* Brazil, population dynamics 5729
  - Fabaceae, Japan 5706
  - *Picea glauca,* Canada, chemical control 9187
- insects, broadleaves, Finland, food plants 2299

Lepidosaphes salicina, insect pests, shelterbelts, China, natural enemies 5688

Lepidothamnus fonkii, deforestation, nature conservation, Chile 3253

Lepidozamia, flowers, insects, Australia 3038

Leptadenia pyrotechnica, vegetation types, synecology, soil properties, deserts, Saudi Arabia 8162

Leptodermis lanceolata, biomass production, India, equations 789

Leptographium abietinum, fungal diseases, *Pseudotsuga menziesii,* USA, disease vectors 5661

Leptographium procerum, fungal diseases, *Pinus sylvestris,* France, damage 3165

Leptographium terebrantis, fungal diseases, *Pseudotsuga menziesii,* USA, disease vectors 5661

Leptographium wingfieldii, fungal diseases, *Pinus sylvestris,* water stress, France 1934

Leptospermum continentale, flowers, anatomy, pollination 2033

Leptospermum laevigatum, seeds, forest fires, Australia, insulation 2100

Leptospermum myrsinoides
- flowers, anatomy, pollination 2033
- seeds, forest fires, Australia, insulation 2100

Leptospermum scoparium
- cold resistance, hardening, temperature, New Zealand, variation 8762
- erosion control, New Zealand 4942
- essential oils, New Zealand 1806
- frost resistance, plant succession, New Zealand 281
- wood anatomy 2939

Lepus americanus
- hares
  - boreal forests
    - Canada, herbicides 4060
    - ground vegetation, Canada 9227
- mammals
  - *Betula,* defence mechanisms, evolution, USA 4915
  - broadleaves, browsing damage, USA 4919
  - *Populus,* defence mechanisms, evolution, USA 4915

Lepus timidus
- *Betula pendula,* browsing damage, Finland, resistance 3221
- weed control, woody weeds, Norway 10070

Lesotho
- *Eucalyptus,* species trials, frost resistance 2547
- insect pests, *Nematus oligospilus, Salix,* biology, damage 9175

Leucadendron coniferum, reproductive behaviour, fynbos, South Africa 1305

Leucadendron meridianum, reproductive behaviour, fynbos, South Africa 1305

Leucadendron rubrum, plant growth regulators, cytokinins, sex, phenology, South Africa 3778

Leucaena
- agroforestry
  - Haiti 1563
  - innovation adoption, Indonesia 3260
- chromosome number, DNA 8247
- insect pests
  - *Heteropsylla cubana*
    - Malawi 6649
    - parasitoids 7439
- shelterbelts, crops, India 710
- species trials
  - Puerto Rico 1666
  - reclamation, mined land, Peninsular Malaysia 3240
- taxonomy, Mexico 8134
- variety trials, Kenya 5060

Leucaena collinsii
- species trials
  - India 1673
  - reclamation, desert soils, Egypt 3372

Leucaena diversifolia
- gums
  - exudates
    - chemistry
      - provenance
        - Guatemala 2979
        - India 2979
        - USA 2979
- insect pests
  - *Heteropsylla cubana*
    - India
      - resistance 629
      - species trials 629
    - Réunion, surveys, methodology 9139
- seedling growth, hybrids 7168
- silvicultural systems, USA, growth 6090
- species trials, Indonesia 1653

Leucaena diversifolia *cont.*
- symbiosis, *Rhizobium,* nitrogen fixation, seedlings, isotope dilution 8263
- variety trials, biomass production, Venezuela, nutritive value 5061

Leucaena esculenta, hybrids, molecular genetics, identification, Mexico 2224

Leucaena glauca (*see Leucaena leucocephala*)

Leucaena latisiliqua
- insect pests
  - *Heteropsylla cubana*
    - India
      - resistance 629
      - species trials 629

Leucaena leucocephala
- *Acacia xanthophloea,* allelopathy, crops 8176
- agroforestry
  - Brazil 2422
  - choice of species, development projects, Cameroon 6734
  - contour ridging, India 2421
  - coppice, Burkina Faso 10117
  - economics
    - India 727
    - Tanzania 3261
  - erosion control, Malawi 3256
  - fodder, production, Nigeria 8421
  - fuelwood, India 6726
  - green manures, soil chemistry, Kenya 3257
  - India 7582
  - plant competition, Togo 7573
  - pruning trash, decomposition, precipitation, Nigeria 8434
  - range management, research, India 10114
  - soil conservation, water conservation, India 5875
- allelopathy
  - crops 545
  - foliage, extracts 3106
- biomass production
  - equations, India 2499
  - farm forestry, Nepal, equations 6966
- browse plants, insect pests, Nigeria 8325
- cutting programmes, fodder, production, Nigeria 2672
- *Diospyros celebica*
  - mixtures
    - Indonesia
      - growth 1788
      - spacing 1788
- direct sowing, agroforestry, Jamaica 2419
- farm forestry, soil fertility, India 2902
- fodder
  - production, nutritive value, reviews 8677
  - variety trials, Brazil 8568
- forest litter
  - decomposition, soil chemistry, Indonesia 1908
  - India 3582
- forest nurseries
  - fertilizers, sewage, India 6905
  - growing media
    - Dominican Republic 6088
    - Sri Lanka 5115
- forest plantations, nitrogen cycle, India 4531
- genetic variation
  - isoenzymes
    - Central America 590
    - Haiti 590
    - Madagascar 590
- green manures
  - Burundi 8679
  - *Swietenia macrophylla,* seedling growth, Indonesia 1711
- gums
  - exudates
    - chemistry
      - provenance
        - Guatemala 2979
        - India 2979
        - USA 2979
- hybrids, molecular genetics, identification, Mexico 2224

Leucaena leucocephala *cont.*
- insect pests
  - *Heteropsylla cubana*
    - Africa 2312
    - Colombia 7444
    - India
      - resistance 629
      - species trials 629
    - Indonesia, control 1503
    - Réunion, surveys, methodology 9139
- micropropagation 8577
- mycorrhizas
  - *Acaulospora laevis,* seedling growth 1442
  - *Gigaspora margarita*
    - plant nutrition, nutrient uptake 6614
    - seedling growth 1442
  - *Glomus*
    - seedling growth 1442
      - India 3153
  - *Glomus etunicatum,* plant nutrition, nutrient uptake 6614
  - *Glomus fasciculatum,* plant nutrition, nutrient uptake 6614
  - *Glomus macrocarpum,* rhizosphere fungi 5605
  - *Sclerocystis rubiformis,* seedling growth 1442
  - seedling growth
    - photosynthesis 596
    - plant nutrition 596
    - plant water relations 596
- nitrogen cycle, nitrogen fixation, USA 1138
- nitrogen fixation
  - measurement 1289
  - Puerto Rico, estimation, techniques 8500
- nodulation, *Rhizobium,* biomass production, plant nutrition 7391
- phosphorus fertilizers, sulfur fertilizers, seedling growth 4298
- plant parasitic nematodes
  - *Meloidogyne,* shade trees, crops, Cuba 1496
  - surveys, India 1497
- pruning trash
  - chemistry
    - decomposition
      - agroforestry
        - Indonesia 1939
        - laboratory tests 1939
  - decomposition, soil fauna, Nigeria 5262
- root nodules, *Rhizobium loti* 8270
- seed oils, chemistry 2975
- seed production, seed germination, India 4268
- seedling growth
  - biofertilizers, Puerto Rico 1713
  - hybrids 7168
  - photosynthesis, foliage, India 1261
  - seeds, pollution, vehicles, Pakistan 10155
  - symbiosis
    - *Bradyrhizobium japonicum,* nitrogen fixation 3151
    - *Rhizobium,* nitrogen fixation 3151
- seedlings
  - nitrogen fixation, measurement 8265
  - plant nutrition
    - nutrient uptake, pot experimentation 1945
    - plant morphology, vesicular arbuscular mycorrhizas, growth 6614
- seeds
  - anatomy, morphology, germination 8062
  - chemistry 5398
    - polysaccharides 7175
  - gums, chemistry, rheological properties, edible species 430
- shade trees, crops, spacing, Cuba 1557
- shelterbelts, crops, India 9281
- short rotation forestry
  - biomass production, India 1736
  - USA, simulation 913
- spacing, biomass production, India 1779

Leucaena leucocephala *cont.*
  species trials
    agroforestry
      acid soils, Cameroon 2542
      soil properties, soil types, Nigeria 6868
    fodder, production, Indonesia 3371
    fuel plantations, Nepal 6865
    India 1664
    Indonesia 1653
    Puerto Rico 1666
    reclamation
      desert soils, Egypt 3372
      fly ash, India 9248
    Sri Lanka 5054
    Zaire 8566
  support trees, crops 9269
  Swietenia macrophylla
    mixtures
      Indonesia
        growth 1788
        spacing 1788
  ultisols, fertilizers, seed size, pot experimentation 7758
  variety trials
    biomass production
      cutting, Brazil 7723
      Venezuela, nutritive value 5061
    Cuba, morphology, growth 6873
    direct sowing, seed germination, Cuba, growth 6872
    India 1652
    Kenya 5060
Leucaena leucocephala* × *Leucaena diversifolia
  plant morphology, Brazil 8074
  variety trials, biomass production, cutting, Brazil 7723
***Leucaena leucocephala* × *Leucaena esculenta*,** hybrids, molecular genetics, identification, Mexico 2224
***Leucaena pallida*,** seedling growth, hybrids 7168
Leucaena pulverulenta
  fodder, variety trials, Brazil 8568
  seed dormancy, Arid Regions 7323
Leucopholis irrorata
  insect pests
    Acacia mangium, Philippines 3185
    Calliandra calothyrsus, Philippines 2302
***Leucopogon fasciculata*,** synecology, canopy gaps, natural regeneration, New Zealand 1413
***Leuronota calycophylli*,** insect pests, *Calycophyllum spruceanum,* Peru, damage 5698
Lianes (*see* Climbers)
Liberation felling
  broadleaves, mixed forests, USA, insect pests, *Pissodes strobi* 924
  conifers, advance growth, USA 2627
  forest trees, Mexico, girdling, poisoning 2648
  Pinus sibirica, crown, development, Russia 9518
Liberia, land use planning, agroforestry, development 1562
Libocedrus chilensis
  bibliographies 6793
  deforestation, nature conservation, Chile 3253
  forest decline, stand characteristics, mortality, Argentina, analysis 3019
  genetics, isoenzymes 2197
  plant succession, Argentina 9015
  pollen, viability, age of trees, Argentina 6510
  reproductive behaviour, plant morphology, Argentina 2104
  synecology, Argentina 1552
Libocedrus decurrens
  forest fires, mortality, simulation, USA 380
  mycorrhizas
    Glomus mosseae, inoculation 9076
    soil fungi, forest fires, erosion, USA 2243
  provenance trials, USA 4263
***Libocedrus tetragona*,** deforestation, nature conservation, Chile 3253
Libraries, information technology, Ghana 5995
***Licania apetala*,** wood anatomy 6430
***Licania arborea*,** plant water relations, drought, phenology, Costa Rica 2838
***Licania heteromorpha*,** plant physiology, water use efficiency, border effects 3790
Lichens
  Betula, bark, air pollution, Finland, chemistry 7996
  carotenoids, virgin forests, indicator plants, Poland 7300
  forest trees, air pollution, aluminium, Finland 8843
  indicator plants, *Pinus sylvestris,* air pollution, Norway, distribution 1390
  morphology, physiology, *Salix,* branches, UK 8169
  Picea abies, boreal forests, forest management, Sweden 10029
  Picea mariana, air pollution, mercury, Canada 8832
  Pinus, bark, air pollution, Finland, chemistry 7996
  Pinus nigra, epiphytes, altitude, Greece 3945
  Pinus sylvestris, Russia, plant succession, fire 8170
  Populus tremula
    bark, chemistry, soil chemistry, Sweden 8168
    photosynthesis, Norway, adverse effects 8932
  urban forestry, Russia 7306
  wildlife
    Rangifer tarandus
      Abies lasiocarpa
        Canada 5809
        USA 5809
***Licuala*,** rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Life form, *Ficus,* wood anatomy, hydraulic conductivity, Panama 5373
Light
  Abies pindrow, natural regeneration, canopy, Pakistan 5465
  acclimatization
    Abies amabilis, photosynthesis, USA 8930
    Picea abies, chlorophyll, fluorescence 467
  Acer platanoides
    photosynthesis, foliage, zeaxanthin 2085
    street trees, USA 8459
  Albizia lophantha, foliage, nastic movements, biochemistry 1277
  Arbutus unedo, plant physiology, plant competition, Spain 8753
  Atherosperma moschatum, rain forests, canopy, Australia 3536
  Avicennia marina, natural regeneration, soil salinity, soil chemistry, Australia 3883
  Betula, biomass, plant morphology, Finland 9667
  Betula pendula
    nitrogen fertilizers, Finland, browsing damage 3221
    tissue culture
      micropropagation, planting stock, performance 6056
      photosynthesis, foliage 8581
  Betula pubescens, air pollution, ozone, temperature, damage 9753
  broadleaves
    browsing damage, seedling growth, USA 1520
    canopy gaps, crown, Mexico 7023
    carbon dioxide enrichment, plant succession, USA 3099
    soil water, increment, USA 5181
    stand development, climate, phenology, Italy 8665
    tropical forests, plant physiology 6259
  canopy, *Cedrela odorata,* increment, Peru, simulation 6167
Light *cont.*
  Chamaecyparis pisifera, stand structure, Japan, natural regeneration, vegetative propagation 4801
  Chlorophora excelsa
    seedlings
      photosynthesis 3010
      respiration 3010
  conifers
    diameter, Italy, growth effects 6362
    shoots, structure, photosynthesis, carbon dioxide 8109
    understorey, Japan, crown, broadleaves 8064
  Cryptomeria japonica
    canopy, Japan, leaf area index 4468
    crown
      Japan 1777
      simulation, Japan 1782
    natural layering, snow, Japan 4326
    thinning, crown, simulation, Japan 1773
  dark
    Heteromeles arbutifolia, foliage, respiration, habit 6474
    Lepechinia fragrans, foliage, respiration, habit 6474
  Eucalyptus globulus, gas exchange 468
  Eucalyptus polyanthemos, establishment, shelter, Australia 3442
  Eucalyptus regnans, thinning, biomass production, Australia 8650
  Eucalyptus tetrodonta, photosynthesis, carbon dioxide enrichment, temperature, vapour pressure 8937
  Fagus sylvatica
    crown, development, France 6387
    natural regeneration, seedbeds, site factors, Denmark 6920
    seedling growth, survival, plant water relations 3545
    water stress, photosynthesis, plant morphology 1929
  forest trees
    crown, shape, theory 3713
    gas exchange, Guadeloupe, adaptation 4682
    photosynthesis, understorey, Japan 6255
    populations, plant competition, simulation 9363
    seedlings, Panama, predation, growth 3100
  Heliocarpus appendiculatus, foliage, age, plant nutrition, photosynthesis 6491
  insect pests, *Macrochirus praetor, Daemonorops hystrix,* Indonesia 2342
  interception
    conifers, plant morphology, USA 3733
    Guiera senegalensis, savannas, Niger, simulation 3546
  Larix decidua, seedlings, photosynthesis, enzymes 458
  Larix laricina, molecular genetics, biochemistry, ribulose-bisphosphate carboxylase 3981
  Larix leptolepis, seedlings, frost resistance, development, photosynthesis 9663
  leaf area index, tropical forests, canopy, Mexico 8756
  Lonicera, habit, biomass 3550
  mangroves
    foliage
      Australia, phenolic compounds 434
      phenolic compounds 434
  measurement
    equipment 9342
    Pinus taeda, techniques 270
    reviews 1611
  Mora gonggrijpii, seedling growth, plant water relations, Guyana 1222
  Muntingia calabura, seed germination, plant growth regulators, temperature 9440
  Nothofagus, canopy, gas exchange, New Zealand, diurnal variation 4693
  Picea, water stress, photosynthesis 7062

Light *cont.*
- *Picea abies*
  - enzymes 3769
  - foliage, plant morphology, Estonia 7030
  - photosynthesis
    - photoinhibition
      - frost injury 5408
      - temperature, Germany 1292
  - seedlings
    - frost injury, methodology 3315
    - photosynthesis, enzymes 458
  - tissue culture
    - callus
      - cytoplasmic inclusions
        - chloroplasts 395
        - tannins 395
- *Picea mariana,* seedling growth, plant competition, Canada 3880
- *Picea rubens,* plant physiology, USA 8934
- *Pinus,* seedlings, chlorophyll, synthesis 1276
- *Pinus banksiana,* natural regeneration, seedbeds, soil water, laboratory tests 9964
- *Pinus patula,* seed germination, seed moisture, seedling growth, temperature 78
- *Pinus pinea,* chlorophyll 6490
- *Pinus sylvestris*
  - age, photosynthesis, crown, Poland 1278
  - canopy
    - natural regeneration
      - Finland
        - seedling growth 9664
        - simulation 9664
  - enzymes, induction, plant nutrition 1285
  - Finland, variation, measurement 8867
  - foliage
    - distribution, plant competition 2950
    - shoots
      - Finland 2035
      - Sweden 2035
  - natural regeneration, Spain 926
  - seedlings, enzymes, gene expression 3973
  - stand development, Russia, simulation 7792
- *Pinus taeda*
  - plant succession, allelopathy, *Myrica cerifera* 7314
  - stomata, plant physiology 7026
- *Piper auritum,* seed germination, Mexico 3549
- Podocarpaceae, rain forests, synecology, New Zealand 271
- *Populus alba,* tissue culture, callus, chemistry 6487
- *Populus tremula,* epiphytes, bark, chemistry, Sweden 8168
- quality, *Eucalyptus grandis,* stockplants, plant physiology, growth 5221
- *Quercus,* foliage, temperature, USA 3791
- *Quercus ilex,* volatile compounds, monoterpenes 4691
- *Quercus macrocarpa,* photosynthesis, stomatal movement 2991
- *Quercus robur*
  - biochemistry, growth 2993
  - plant morphology, Germany, growth 7028
- *Quercus serrata,* photosynthesis 9844
- rain forests
  - seedlings, canopy, Australia 2798
  - shelterwood system, India 8619
- *Salix,* photosynthesis 451
- *Santalum album,* seedling growth, Australia 3535
- sclerophyllous forests, *Eucalyptus marginata,* seed germination, Australia 8180
- shade, *Pinus sylvestris,* photosynthesis, simulation 9662
- *Shorea,* rain forests, Sri Lanka, plant succession 7022
- solar radiation, measurement 8497

Light *cont.*
- stand development, mortality, deciduous forests, USA 7328
- stress, antioxidants, reviews 466
- *Thuja plicata,* seedling growth, Canada 6253
- *Trema guineensis*
  - seedlings
    - photosynthesis 3010
    - respiration 3010
- understorey, wind damage, Puerto Rico, pioneer species 1075
- weed control, *Picea mariana,* Canada, measurement 2486
- woody plants, foliage, Estonia, measurement, plant morphology 4660
- woody weeds, *Gaultheria shallon,* natural regeneration 4348

Light intensity
- broadleaves, foliage, crown, plant morphology, development 2014
- mangroves, seedling growth, nutrient availability 5386
- Moraceae, foliage, anatomy, photosynthesis 3731
- natural regeneration, canopy gaps, rain forests, Costa Rica 1409
- *Shorea,* mycorrhizas, development, Indonesia 2229
- understorey, Panama, experimental equipment 784

Light penetration
- broadleaves, photosynthesis, seedlings, morphology, Panama 3792
- canopy, stand structure, estimation, techniques 9534
- conifers
  - canopy, simulation 5223
  - seedlings, plant morphology, plant physiology, adaptation 6258
- deciduous forests, stand age, USA 3556
- *Fagus sylvatica,* Italy, growth, morphology 6260
- *Picea glauca,* increment, canopy, Canada 1757
- *Picea mariana,* coniferous forests, Canada 1060
- *Pinus contorta,* canopy, structure, USA 3553
- *Pinus pinaster,* canopy, France, solar radiation, measurement 4469
- *Populus,* canopy, simulation 4213
- *Pseudotsuga menziesii,* USA, measurement 4472
- rain forests, canopy gaps, Australia 3554
- tropical forests, French Guiana, simulation 4214
- woody weeds, canopy, Canada, control 1757

Light relations, seed size, vegetation types, Singapore 9882

Lightning, damage, *Pterocarpus indicus,* plant diseases, bark, Singapore 9857

Lightwood (*see* Resin tapping)

Lignification
- enzyme activity, conifers 1275
- *Eucalyptus gunnii,* enzymes 4678
- *Fagus crenata,* chemistry 3743
- laccase 6460
- *Picea abies,* frost resistance, provenance 7034
- *Pinus sylvestris,* growth effects 4711
- *Pinus taeda* 2019
- *Populus*
  - tissue culture
    - enzymes 5401
    - water stress 4677
- *Populus* 'I-214', cell walls 1233
- wood anatomy, wood chemistry 1223

Lignin
- *Betula,* cell walls 1239
- biosynthesis, hardwoods, cell walls, peroxidases 1246
- cellulose, hemicelluloses, affinity 1245
- *Eucalyptus,* wood anatomy, wood chemistry, reaction wood 5375
- *Ginkgo biloba,* biosynthesis 3760
- *Populus nigra* × *Populus maximowiczii,* wood anatomy, cell walls, lignification 3714

Lignin *cont.*
- synthesis
  - *Pinus contorta,* enzymes, β-glucosidase, xylem 6473
  - *Pinus taeda,* cell culture 8101

Ligustrum
- geographical distribution
  - Asia 7262
  - Europe 7262

Ligustrum japonicum, air pollution, heavy metals, indicator plants, Greece 7106

Ligustrum micranthum, plant water relations, drought resistance, Japan 311

Ligustrum obtusifolium, seedlings, soil toxicity, aluminium, growth 9709

Limonia acidissima
- tissue culture
  - explants, micropropagation 2592
  - micropropagation 5097

Lindera triloba
- fungal diseases, Japan, Scolytidae, ecology, symbiosis 4887
- insect pests
  - Scolytidae
    - Japan
      - fungal diseases, symbiosis 4887
      - symbionts 8339

Lindera umbellata, reproductive behaviour, Japan, sexual dimorphism 8950

Line planting/sowing (*see* Improvement planting)

Linear plantations
- agricultural land, broadleaves, water pollution, control, USA 9496
- insects, Coleoptera, *Populus,* Germany, ecology 2298

Liquidambar
- mixed forests
  - atmosphere
    - isoprenoids
      - emission
        - simulation 8011
        - USA 8011

Liquidambar acalycina, genetic variation, isoenzymes, China 586

Liquidambar formosana
- genetic variation, isoenzymes, China 586
- sap flow, translocation, water stress 4507

Liquidambar styraciflua
- bark, thickness, fire resistance, USA 1197
- carbon dioxide enrichment
  - drought, plant physiology, USA 5406
  - roots, plant water relations, plant nutrition 9670
- control, woody weeds, herbicides, USA 1766-1767
- dwarfism, seedlings, morphogenesis 6397
- foliage
  - development, photosynthesis, ultraviolet radiation 8764
  - optical properties 7032
- frost resistance, climate, simulation, USA 800
- fruiting, control, plant growth regulators, USA 7606
- genetic variation
  - isoenzymes
    - Mexico 586
    - USA 586
- increment, simulation, USA 7676
- nitrogen fertilizers
  - cycling, foliage, USA 8823
  - genetic variation, USA 9464
- nutrient reserves, USA, bottomland forests 3626
- plant competition
  - climbers, USA, woody weeds 6122
  - soil water potential, USA 166
- plant water relations, plant competition, woody weeds, USA 1771
- planting stock, forest nurseries 6072
- reclamation, mined land, tillage, USA 4093
- seed longevity, storage 3381
- stems
  - internodes, growth 8052-8053
  - mechanics 9797
- street trees, electrical phenomena in trees, USA, measurement 778

- ***Liquidambar styraciflua*** *cont.*
  - tree classes, USA, bottomland forests 9575
- ***Liriodendron,*** taxonomy 8978
- ***Liriodendron tulipifera***
  - agroforestry, Corsica 5883
  - air pollution
    - forest litter, decomposition, USA 6344
    - mercury, foliage, gas exchange 8852
    - ozone, carbon dioxide enrichment, foliage, optical properties 9749
  - bark
    - measurement 5952
    - thickness, fire resistance, USA 1197
  - dendrochronology, synecology, increment, USA 5914
  - diameter, Italy, variation 2685
  - foliage
    - decomposition, streams, USA 7917
    - ozone, effects 2867
    - stand characteristics, browse, nutritive value 3196
  - forest litter, decomposition, USA 3584
  - growth models, USA 802
  - growth stress, cell walls 1177
  - insect pests
    - USA
      - canopy gaps, phenolic compounds 2306
      - damage, simulation 1475
  - plant growth regulators, wood strength 6360
  - plant succession, USA, population dynamics 4810
  - reclamation, mined land, tillage, USA 4093
  - seedlings, plant competition, North America, growth 3058
  - species trials, forest plantations, grazing, France 5884
  - stem form, USA 8692
  - stemflow, pH, soil chemistry, acidification, Japan 1992
  - stems, mechanics 9797
  - streams, forest litter, decomposition, USA 8781
  - volume determination
    - equations 8695
    - taper, estimation, USA 4382
  - water stress, osmoregulation 2842
  - weed control, herbicides, USA 942
- ***Lithocarpus densiflorus***
  - amenity and recreation areas, USA, hazards, analysis 8455
  - thinning, canopy, USA 4356
  - volume determination, equations, USA, geographical variation 6163
- ***Lithocarpus edulis,*** roadside plantations, forest influences, air pollution, Japan 7126
- ***Lithocarpus glabra,*** mycorrhizas, Taiwan 3158
- ***Lithocolletis*** (*see Phyllonorycter*)
- ***Lithraea ternifolia,*** mountain forests, synecology, Argentina 2148
- **Lithuania**
  - forest fragmentation, species diversity, models 8154
  - forestry, history 5976-5977
  - pollution, soil properties, monitoring 8796
- ***Litocarpon beardii,*** palaeobotany, Canada 8051
- ***Litsea gardneri,*** foliage, Sri Lanka, polysaccharides 9817
- ***Litsea lanuginosa,*** seed germination, seed treatment, India 9433
- ***Litsea monopetala,*** fodder, choice of species, Nepal 6948
- ***Litsea polyantha,*** agroforestry, biomass production, cycling, India 8432
- **Litter** (*see* Forest litter; Humus)
- **Livestock,** *Eucalyptus citriodora,* agroforestry, weed control, Brazil 6723
- **Lizards**
  - wildlife, *Pinus clausa,* clear felling, USA 4920
  - *Xenosaurus grandis,* tropical forests, Mexico, ecology 6696
- **Loans** (*see also* Subsidies)
- **Loans** *cont.*
  - forestry
    - nature conservation 7593
    - Philippines, environmental degradation 2781
- ***Lochmaea caprea,*** insect pests, *Salix,* attractants, phenolic compounds 7472
- **Logging**
  - advance growth, Canada, conifers, survival 4581
  - biomass, forest ecology, Spain 2893
  - birds
    - forest ecology, Australia 4062
    - *Pseudotsuga menziesii,* USA, dead trees, ecology 2626
  - bottomland forests, biogeochemistry, USA 7270
  - *Castanea sativa,* coppice, stand characteristics, Italy, temporal variation 8611
  - *Chamaecyparis obtusa,* stand characteristics, Japan, damage, growth 7108
  - conifers, forest roads, Japan, access 9603
  - control, land use, conflict, Indonesia 1543
  - coppice
    - France, work study 6914
    - Italy
      - damage 8671
      - reviews 8617
  - damage
    - broadleaves, soil density, USA 2895
    - soil physics, USA 349
  - deer, *Odocoileus hemionus,* forest management, Canada 239
  - development projects, environmental protection, Philippines, planning, economics 46
  - effects, water quality, USA 347
  - erosion, streams, water quality, USA 4578
  - *Eucalyptus*
    - Australia, buffer zones, planning 10086
    - hydrology, Australia, simulation 3336
  - *Fagus sylvatica,* forest economics, France, profitability 9653
  - floodplains, water quality, USA 2891
  - forest economics
    - Canada, analysis, socioeconomics 4457
    - France 8746
      - labour contracts 9407
    - labour, Japan 6850
  - forest fires, natural regeneration, Ghana 8881
  - forest management
    - decision making, statistical analysis 1019
    - planning, mathematics, geographical information systems, methodology 6199
    - sustainability, mountain forests, Sarawak 6988
  - forest roads, silviculture, Japan 4419
  - forest trees
    - plant nutrition
      - soil chemistry
        - fertilizers, conferences 770
        - soil amendments, conferences 770
  - insect pests, *Ips typographus, Picea jezoensis,* Japan, spread 7463
  - landscape, USA, assessment 4977
  - landslides, storms, USA, simulation 9768
  - mammals, forest ecology, Australia 4062
  - marsupials, *Gymnobelideus leadbeateri, Eucalyptus,* wildlife conservation, Australia 9216
  - mixed forests, soil chemistry, controlled burning, USA 9689
  - natural regeneration, forest management, Canada, decision making 4321
  - *Pinus clausa,* natural regeneration, forest fires, USA 5469
  - *Pinus strobus,* forest management, Canada 4420
  - *Pinus taeda,* stand density, simulation, USA 3493
  - planning, forest management, Japan 4418
- **Logging** *cont.*
  - private forestry, USA, socioeconomics 5987
  - *Quercus ilex,* water quality, acid deposition, sulfur, Spain 7548
  - rain forests, erosion, runoff, Sabah 4087
  - runoff, USA 8380
  - silvicultural systems, Canada, costs 7855
  - site preparation, carbon cycle, conferences 4175
  - soil, *Quercus,* USA, understorey, ferns 1392
  - soil formation, soil chemistry, New Zealand, *Pinus radiata* 1097
  - streams
    - USA, damage, ecology 4936
    - water quality, Peninsular Malaysia 7109
  - *Swietenia macrophylla,* forest economics, deforestation, Amazonia 7568
  - tree length logging
    - forest trees, natural regeneration, Canada, microclimate 8623
    - *Populus tremuloides,* Canada, stand development 9588
  - tropical forests
    - canopy gaps, French Guiana, mortality 9533
    - deforestation, forest management, sustainability 9609
    - increment, Brazil, regrowth 6180
    - wildlife, nature conservation 9296
  - *Virola surinamensis,* forest ecology, Brazil, damage 1173
  - watersheds
    - erosion, Peninsular Malaysia 7110
    - USA, environmental impact, assessment 8005
  - wetlands, USA, ecology 8152
  - whole tree logging
    - *Cryptomeria japonica,* thinning, forestry machinery, mobile units 4369
    - forest trees, natural regeneration, Canada, microclimate 8623
    - *Picea sitchensis*
      - plant nutrition, UK, productivity 1136
      - rotations, growth, UK 6110
    - *Pinus radiata,* plant nutrition, New Zealand, productivity 1135
    - *Populus tremuloides,* Canada, stand development 9588
  - wildlife, forest management, Canada 4912
- **Logging effects**
  - mammals, *Eucalyptus,* forest ecology, Australia 3194
  - *Picea abies,* logs, fungi, Sweden 7254
  - *Picea engelmannii,* Canada, plant competition, growth 4580
  - wildlife, forest ecology, nature conservation, Australia, reviews 4129
- **Logs,** fungi, *Picea abies,* logging effects, Sweden 7254
- ***Lonchocarpus,*** wood anatomy 4629
- ***Lonchocarpus castilloi,*** rain forests, Mexico, wood anatomy 1211
- ***Lonchocarpus dipteroneurus,*** plant water relations, drought resistance, Venezuela 3594
- ***Lonchocarpus guatemalensis,*** wood anatomy 4629
- ***Lonchocarpus minimifolium,*** buds, phenology, plant water relations, Costa Rica 2929
- ***Lonicera,*** weed control, USA, herbicides 8643-8644
- ***Lonicera japonica,*** woody weeds, USA, *Liquidambar styraciflua* 6122
- ***Lonicera periclymenum,*** light, habit, biomass 3550
- ***Lonicera quinquelocularis,*** biomass production, India, equations 789
- ***Lonicera tatarica,*** woody weeds, forests, natural regeneration, USA 5473
- ***Lonicera xylosteum,*** light, habit, biomass 3550
- ***Lophira alata,*** rain forests, history, pollen analysis, Cameroon 2130

Lophodermella sulcigena, fungal diseases, *Pinus sylvestris,* Finland, detection 7663
Lophodermium pinastri, fungal diseases, *Pinus resinosa,* Canada 5657
Lophodermium seditiosum, fungal diseases, *Pinus sylvestris,* cell culture, metabolites, stilbenes 3762
Lophopetalum javanicum, wood chemistry, Indonesia 6448
Lopping, *Acacia nilotica,* forest plantations, increment, India 1798
Loranthaceae, mistletoes, *Tectona grandis,* Indonesia 1468
Loranthus cordifolius, mistletoes, *Quercus,* age of trees, India 617
Loranthus vestitus, mistletoes, *Quercus,* age of trees, India 617
Lovoa trichilioides, genetic variation, geographical distribution, genetic markers 5528
Lowland areas, forest trees, flora, Indonesia, books 4163
Loxodonta africana
  elephants
    Adansonia digitata, browsing damage, Tanzania, simulation 4048
    canopy gaps, tropical forests, Gabon 684
Loxodonta africana cyclotis, elephants, *Sacoglottis gabonensis,* fruiting, Gabon 3223
Luehea candida, buds, phenology, plant water relations, Costa Rica 2929
Lumnitzera littorea, wood anatomy 414
Lumnitzera racemosa
  fisheries, Sri Lanka 9232
  foliage, light, Australia, phenolic compounds 434
  mangrove forests, remote sensing, synecology, India 6996
  mangroves, foliage, Kenya, chemistry 4676
Lupinus arboreus
  biomass production, agroforestry, nurse trees, defoliation, UK 3478
  deer, *Cervus,* browse, New Zealand 9226
  fungal diseases, *Glomerella cingulata,* New Zealand 5649
Luxembourg, canopy, remote sensing, reflectance 1033
Lygropia clytusalis, insect pests, *Brachychiton,* Australia 2327
Lygus rugulipennis, insect pests, *Pinus sylvestris,* seedlings, damage 1478
Lymantria dispar
  insect pests
    Betula papyrifera, carbon dioxide enrichment, plant composition 5711
    biological control
      Belarus, parasitoids 10055
      by *Bacillus thuringiensis,* USA, reviews 5793
    birds, USA 3179
    broadleaves
      USA
        biological control 5796
        biology 5733
        resistance 2318
    chemical control, birds, nontarget effects 673
    computer techniques, damage 35
    forest trees
      foliage, biology 637
      Germany, control 5795
      USA
        pheromone traps 674
        physical control 7498
    Germany, biological control 5803
    history, North America 2333
    introduced species, population genetics, identification 7455
    New Zealand, introduced species 4884
    North America, population dynamics, simulation 5709
    Pinus strobus, carbon dioxide enrichment, plant composition 5711
Lymantria dispar *cont.*
  insect pests *cont.*
    Populus
      biological control, foliage, chemistry 9192
      genetic engineering, resistance 5724
      USA, biology 645-646
    Quercus
      biological control, tannins 7508
      Canada, biological control 677
      feeding behaviour, site factors 2323
      Germany 10057
      insecticides, toxicity 9191
      plant nutrition, USA, resistance 7446
      USA
        biology 645-646
        control 5786, 5799
        defoliation 3725
    Quercus robur, Russia, damage 10039
    Quercus rubra
      defoliation 2328
      resistance, genetic variation 8331
      USA, biological control 9162
    Robinia pseudoacacia, Yugoslavia, pathogens 2325
    simulation, population dynamics 2321
    urban forestry, USA, control 5725
    USA 5704
      control 5785
      monitoring 2324
      natural enemies, entomogenous fungi 2336
      sampling 9160
        management 5720-5721
      simulation
        population dynamics 9151
        spread, spatial distribution 636
Lymantria mathura, insect pests, introduced species, population genetics, identification 7455
Lymantria monacha
  insect pests
    biological control, Belarus, parasitoids 10055
    Germany
      biological control 5803
      biology 8333
      population dynamics 6651
    introduced species, population genetics, identification 7455
Lymantriidae, insect pests, *Calliandra calothyrsus,* Philippines 2302
Lyonia ovalifolia, forests, synecology, stand structure, natural regeneration, India 2167
Lysiana exocarpi, mistletoes, broadleaves, host parasite relationships, seed germination, seedling growth 5674
Lysiloma acapulcensis, rain forests, Mexico, wood anatomy 1211
Lysiloma seemanii, plant water relations, drought, phenology, Costa Rica 2838
Lythraceae
  phylogeny 3995
  taxonomy 3995
Maackia amurensis
  plant composition, isoflavones 9811
  root nodules
    Bradyrhizobium, seedling growth 6608
    nitrogen fertilizers, seedling growth 5288
  shoot cuttings, USA 1707
Macaca fuscata, monkeys, broadleaves, seed production, Japan 689
Macalla thyrsisalis, insect pests, *Swietenia mahagoni,* USA, chemical control 8351
Macaranga, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Macaranga gigantea, selective felling, soil degradation, Sabah, logging effects 8771
Macaranga heynei, photosynthesis, Singapore 6467
Macaranga hypoleuca, selective felling, soil degradation, Sabah, logging effects 8771
Macaranga quadriglandulosa, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Macaranga rhizinoides, wood anatomy 414
Macaranga triloba, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Macau, mangrove forests, fungi 7384
Maclura aurantiaca (*see Maclura pomifera)*
Maclura pomifera, tissue culture, metabolites, chemistry 9830
Maconellicoccus hirsutus, insect pests, *Morus,* Indonesia, control 2378
Macrochirus praetor
  insect pests
    Daemonorops hystrix
      Indonesia
        control 2379
        damage 2342
        light 2342
Macrodiplosis dryobia, insect pests, *Quercus,* Irish Republic 5682
Macrodiplosis volvens, insect pests, *Quercus,* Irish Republic 5682
Macrotermes malaccensis, insect pests, *Eucalyptus urophylla,* Indonesia, chemical control 1502
Macrozamia, flowers, insects, Australia 3038
Macrozamia communis, roots, symbiosis, morphology 3729
Madagascar
  Adenanthera mantaroa, taxonomy, new species 9889
  Danais, climbers, taxonomy 9892
  deciduous forests, hurricanes, forest ecology, natural regeneration 6268
  Eucalyptus, forest litter, foliage, fungi 7403
  forest resources, remote sensing 3524
  fungal diseases
    Aulographina eucalypti, Eucalyptus, foliage 7403
    Calonectria quinqueseptata, Eucalyptus, foliage 7403
    Harknessia hawaiiensis, Eucalyptus, foliage 7403
    Kirramyces epicoccoides, Eucalyptus, foliage 7403
    Mycosphaerella heimii, Eucalyptus, foliage 7403
    Pseudocercospora eucalyptorum, Eucalyptus, foliage 7403
  Leucaena leucocephala, genetic variation, isoenzymes 590
  Melaleuca quinquenervia, seeds, chemotaxonomy 9891
  Millettia, taxonomy 7236
  Pinus kesiya
    stem form, eccentricities, thinning 4634
    thinning, increment, wood properties 8858
  Ravenea, taxonomy 8963
  riparian forests, stand characteristics 3083
  Sarcolaena isaloensis, taxonomy 493
  Vaughania, taxonomy 9893
  xerophytes, Arid Regions, stand structure, natural regeneration 8998
Madeira, medicinal plants 7809
Madhuca longifolia
  flowering, fruiting, medicinal plants, India 988
  reclamation
    waste land
      irrigation, India 1539
      planting, India 1539
  reproductive behaviour, phenology, abscission, India 388
Maesobotrya, taxonomy, nomenclature, Zaire 5426
Maesopsis eminii
  agroforestry, species trials, Rwanda 4961
  genetic resources, conservation, Tanzania, techniques 8236
  tissue culture, explants, culture media, micropropagation 874

- ***Magdalis frontalis,*** insect pests, *Pinus nigra,* Spain, biology, damage 9147
- ***Magdalis memnonia,*** insect pests, *Pinus nigra,* Spain, biology, damage 9147
- ***Magnolia,*** taxonomy 8978
- ***Magnolia denudata,*** flowers, discoloration 450
- ***Magnolia fraseri,*** genetic variation, isoenzymes, USA 579
- ***Magnolia grandiflora***
  - flowers
    - discoloration 450
    - ovules, development, morphology 2931
  - root pruning, transplanting, USA, growth 3285
- ***Magnolia hypoleuca***
  - flowers, discoloration 450
  - stem form, snow, Japan, resistance 2954
- ***Magnolia kobus,*** flowers, discoloration 450
- ***Magnolia liliiflora,*** flowers, discoloration 450
- ***Magnolia macrophylla,*** genetic variation, isoenzymes, USA 579
- ***Magnolia salicifolia,*** flowers, discoloration 450
- ***Magnolia schiedeana,*** reproductive behaviour, Mexico 2094
- ***Magnolia tripetala,*** genetic variation, isoenzymes, USA 579
- ***Malacosoma disstria***
  - insect pests
    - *Populus*
      - clones, defoliation, resistance 3182
      - genetic engineering, resistance 5724
    - *Populus tremuloides,* USA, population dynamics 5701
- ***Malacosoma neustria,*** insect pests, Germany, biological control 5803
- **Malawi**
  - *Acacia,* species trials, coppicing 1670
  - broadleaves, volume determination, roundwood 2689
  - *Colophospermum mopane,* geographical distribution, site factors, vegetation types 6535
  - deforestation, fuelwood, forest nurseries 3423
  - *Eucalyptus,* species, provenance, wood properties, variation 4192
  - *Faidherbia albida,* canopy, soil properties 8430
  - farm forestry, economics, incentives 9260
  - forest influences, watersheds, runoff, simulation 8870
  - forest resources, deforestation, refugees 6720
  - *Gliricidia sepium*
    - provenance trials, genetic variation 2555
    - spacing, weed control, community forestry 1786
  - insect pests
    - *Cinara cupressi,* conifers, biological control 8350
    - *Heteropsylla cubana, Leucaena* 6649
    - Saturniidae, broadleaves, forest fires 7452
  - *Leucaena leucocephala,* agroforestry, erosion control 3256
  - *Widdringtonia nodiflora* 6383
- **Malaysia** (*see also* Peninsular Malaysia; Sabah; Sarawak)
  - bamboos, *Gigantochloa scortechinii,* wood anatomy, fibres, wood chemistry 204
  - broadleaves, vegetative propagation 2602
  - canes and rattans, plant morphology, roots, growth 6434
  - forest resources, research 3345
  - forestry, research, conferences 777
  - fungal diseases, *Fusarium, Pterocarpus indicus,* chemical control 7410
  - *Illicium,* taxonomy 8133
  - insect pests
    - Coleoptera, rain forests, trapping 7481
- **Malaysia** *cont.*
  - insect pests *cont.*
    - *Sinoxylon conigerum, Hevea brasiliensis,* wood chemistry, effects 6659
  - kerangas, *Dischidia major, Philidris,* mutualism 9134
  - nectar, sugars 421
  - provenance trials, *Acacia auriculiformis* 6867
  - *Shorea leprosula,* shoot cuttings, plant growth regulators 6890
  - tropical forests, nature conservation 5895
- **Mali**
  - browse, phenology, foliage, biomass production, variation 7148
  - forestry, research 8532
  - medicinal plants, woody plants 3299
  - non-wood forest products, collection 6142
  - remote sensing, multispectral imagery, vegetation, land use, change 9630
  - reserved forests, USA, government organizations 8516
  - savannas
    - remote sensing, biomass 3922
    - soil, topography 3922
- ***Mallotus japonicus***
  - crown, Japan, branches, development, morphology 9795
  - pioneer species, topography, plant morphology, Japan 8765
- ***Mallotus paniculatus,*** photosynthesis, Singapore 6467
- ***Mallotus philippensis***
  - forest litter, decomposition, India 1917
  - understorey, stand characteristics, India 5471
- ***Malouetia,*** medicinal plants, alkaloids 422
- **Malpighiaceae,** new species, Latin America 9906
- ***Malus,*** foliage, water stress, plant hairs 2829
- ***Malus sylvestris***
  - genetic resources
    - Asia 7366
    - Europe 7366
  - insects, Lepidoptera, Finland, food plants 2299
  - seed germination, seed treatment, storage, Poland 849
- ***Malus toringo,*** street trees, planting, water uptake 4510
- **Mammals**
  - *Apodemus sylvaticus, Juniperus thurifera,* seed dispersal, Spain 2387
  - boreal forests, forest borders, clear felling, Sweden 5810
  - *Castor fiber,* broadleaves, Germany 6674
  - *Eucalyptus,* logging effects, forest ecology, Australia 3194
  - forest ecology, logging, Australia 4062
  - leopards, *Acacia,* South Africa 3206
  - *Lepus americanus*
    - *Betula,* defence mechanisms, evolution, USA 4915
    - broadleaves, browsing damage, USA 4919
    - *Populus,* defence mechanisms, evolution, USA 4915
  - nature reserves
    - tropical forests
      - India
        - models 10076
        - sampling 10076
  - rain forests, forest fragmentation, biodiversity, Mexico 9205
  - *Thomomys*
    - USA
      - control 9228
      - vegetation 7918
  - *Vombatus ursinus,* forest trees, Australia 10063
  - wildlife, *Eucalyptus,* Australia 10062
- **Management** (*see* Forest management)
- ***Mangifera indica***
  - air pollution, susceptibility, plant physiology, India 2876
  - aquatic fungi, endophytes, Pakistan 8253
  - cambium, cell division, seasonal variation 4644
- ***Mangifera indica*** *cont.*
  - forest influences, soil properties, Nigeria, land use 8024
  - medicinal plants, Zaire 7808
  - plant parasitic nematodes, *Meloidogyne,* shade trees, crops, Cuba 1496
  - reproductive behaviour, phenology, abscission, India 388
  - urban forestry, air pollution, tolerance, India 2875
- **Mangroves**
  - adaptation, foliage, anatomy, chlorophyll, India 9790
  - *Aegiceras corniculatum,* phenology, forest litter, Australia 3704
  - afforestation, erosion control, India 3225
  - *Avicennia,* shoot cuttings, India 102
  - *Avicennia germinans*
    - foliage, chemistry, iridoids, glucosides 8914
    - stomata, oscillation, leaf water potential 2839
  - *Avicennia marina*
    - foliage
      - chemistry, seasonal variation, Pakistan 7192
      - Saudi Arabia, heavy metals 2980
    - palaeoecology, pollen analysis, New Zealand 4759
    - phenology, forest litter, Australia 3704
    - plant growth regulators, seedling growth, plant physiology 4699
    - pneumatophores
      - algae, epiphytes, South Africa 7301
      - gas exchange 2041
    - recalcitrant seeds, seed germination, seed development 3385-3386
    - reproductive behaviour, seed dispersal, Australia 3041
    - stand characteristics, Pakistan 3961
  - broadleaves, foliage, Kenya, chemistry 4676
  - climatic change, Australia 6269
  - *Duabanga,* geographical distribution, coastal areas, India 2120
  - epiphytes, Cyanobacteria, nitrogen fixation, Guadeloupe 537
  - foliage
    - Belize, damage 625
    - light
      - Australia, phenolic compounds 434
      - phenolic compounds 434
    - pigments, seasonal variation, India 4675
  - forest management, St Lucia, charcoal 3085
  - forest plantations, sustainability, underplanting, Bangladesh 6108
  - geographical distribution, Mexico 7264
  - *Heritiera,* chromosomes, India 8235
  - *Kandelia candel,* salt tolerance, histology 9671
  - natural regeneration, recruitment, environmental factors, Belize 6575
  - *Nypa fruticans,* afforestation, site requirements, tides, Bangladesh 7776
  - palaeobotany
    - America, reviews 6528
    - Neotropical Region 6533
  - plant morphology, allometry, Peninsular Malaysia 6427
  - *Rhizophora apiculata*
    - photosynthesis, treatment 4713
    - spacing, increment, Indonesia 1776
  - *Rhizophora mangle*
    - habit, plant physiology, salinity, plant nutrition 465
    - mutations, Puerto Rico, pigments 5520
    - oil spills
      - Panama
        - damage, ecology 4575, 4577, 6357
        - persistence 4576
    - rhizosphere, species diversity, Venezuela 518

Mangroves *cont.*
- *Rhizophora mangle cont.*
  - water pollution
    - indicator plants, mutations, assessment 9052
    - polycyclic aromatic hydrocarbons, Puerto Rico, mutations 8857
- Rhizophoraceae, epidermis, morphology, taxonomy, Nigeria 3724
- roots, biomass, Cuba 7149
- soil chemistry, Brazil 1092
- *Sonneratia*
  - geographical distribution, coastal areas, India 2120
  - salt tolerance, Australia 6553
- stand structure, soil properties, Nigeria 7293
- synecology
  - Bermuda, sea water 525
  - conferences 16
  - forest management 5450
- utilization, fisheries, Sri Lanka 9232
- wildlife, crabs, natural regeneration, Bangladesh 7257

Manihot glaziovii, rain forests, forest litter, chemistry, decomposition, Nigeria 3578

Manilkara bidentata
- rain forests, wind damage, Puerto Rico 3561
- wind damage, stand structure, recruitment, Puerto Rico 1076

Manilkara zapota, rain forests, Mexico, wood anatomy 1211

Maniltoa, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287

Manniophyton fulvum, browse plants, insect pests, Nigeria 8325

Mansonia altissima, insect pests, *Godasa sidae,* Cameroon, biology 9161

Mapping
- agroforestry, soil suitability, Cuba 9288
- boreal forests
  - carbon cycle, Russia 1952
  - land classification, soil, Russia 5210
- ecosystems, Canada, methodology 7004
- forest ecology, nature conservation, methodology 7003
- forest inventories, Canada, production 6995
- forest resources, forest management, India 3523
- forests, geographical information systems, Switzerland 2756
- geographical information systems
  - forest inventories, forest pests 9632
  - stand characteristics, composition, site factors, Norway 5021
- land use, forest ownership, forest management, Indonesia 2758
- mixed forests, composition, Switzerland, simulation 246
- *Quercus ilex,* abandoned land, stand characteristics, botanical composition, Spain 7849
- remote sensing
  - forest fires, USA 4450
  - Landsat, stand characteristics, USA 4444
  - radiometry, USA 3510
  - statistical analysis, USA 3521
- soil parent materials, site types, Germany 9708
- soil types, Australia 8743
- stand structure, equipment 3317
- steppes, land classification, soil, Russia 5210
- surveying, sampling, statistical analysis 2759
- vegetation types, land use, UK, change 8735

Maps
- deforestation 7629
- forest inventories, USA 1022
- forest trees, geographical distribution, Austria 7001
- forests, national parks, synecology, Poland 2139
- geographical distribution, Greece, trees, shrubs, Greece 753

Maps *cont.*
- geographical information systems
  - basal area, botanical composition, Canada 4451
  - forestry, mathematical models 4451
- history, forest management, Germany 9614
- landscape
  - history, Germany 8525
  - USA, multivariate analysis 8736
- site types, silviculture, Germany 9639
- soil, site class assessment, Argentina 1087
- vegetation
  - synecology, Nepal 1371
  - woody plants, remote sensing, multispectral imagery, Zimbabwe 7846
- woodlands, national parks, synecology, Poland 1377

Maranthes corymbosa
- seedlings
  - carbon dioxide enrichment
    - photosynthesis 1266
    - stomata, leaf conductance 3597

Marine fungi
- *Halophytophthora*
  - mangrove forests, forest litter, Bahamas 9066
  - salt marshes, forest litter, USA 9066

Marketing
- consultants, private forestry, timber trade, USA, simulation 2777
- forest economics, multiple use, Germany 1048

Marking
- paints, *Acer saccharum,* USA, damage 2894
- tools, history, Italy 211

Marlierea, South America, wood anatomy 6415

Marsupials
- *Eucalyptus,* simulation, Australia 2388
- *Gymnobelideus leadbeateri*
  - *Eucalyptus*
    - Australia, population dynamics 5818
    - wildlife conservation, Australia 9216
  - forest fires, Australia, simulation models 9225
  - forest management, nature conservation, Australia 4967
- *Petauroides volans, Eucalyptus regnans,* forest management, Australia 1525
- *Petrogale penicillata,* forests, New Zealand, control, water pollution 1506
- rain forests, Brazil, population ecology 9215
- *Trichosurus caninus*
  - Australia
    - simulation
      - forest fragmentation 8363-8364
      - population dynamics 8363
      - population genetics 8364
- *Trichosurus vulpecula*
  - forest trees, remote sensing, New Zealand, damage 471
  - forests, New Zealand, control, water pollution 1506
- *Wallabia bicolor*
  - *Eucalyptus regnans,* tree guards, damage 6691
  - forest trees, browsing damage, seedlings 5823
- wildlife
  - *Eucalyptus*
    - Australia, population dynamics 5819
    - thinning, Australia 5822

Martes, wildlife, books 6783

Martes americana, wildlife, clear felling, Canada, boreal forests 3204-3205

Martinique, forestry, forest management, reviews 812

Mastixia trichotoma, wood anatomy 414

Mathematical models, forest fires, fire suppression, firebreaks 375

Mathematics
- dendrochronology, statistical analysis 6821
- forest management, decision making, computer techniques 1623
- *Pinus sylvestris,* site class assessment, site factors, Russia 5187
- *Salix viminalis,* genetic defects, methodology 589
- stand structure, theory 6171
- statistical analysis, techniques 9346

Mating systems
- *Pseudotsuga menziesii*
  - seed orchards
    - genetic variation, France 9038
    - pollen, France, dispersal 9039

Matsucoccus feytaudi
- insect pests
  - *Pinus pinaster*
    - forest decline, France 4036
    - France
      - monitoring, pheromone traps 5700
      - resistance, provenance trials 9970

Matsucoccus josephi
- insect pests
  - *Pinus*
    - Greece, geographical distribution, history 4881
    - Mediterranean Region 2315
    - Middle East, geographical distribution 8330

Matsucoccus thunbergianae
- insect pests
  - *Pinus thunbergii*
    - Korea Republic 7441
      - monitoring, pheromone traps 5699

Maturation
- *Pseudotsuga menziesii*
  - ontogeny, plant morphology, measurement 4652
  - organ culture, measurement, plant morphology 4653
  - seedlings, measurement, plant morphology 4653
  - shoot cuttings, measurement, plant morphology 4653

Mauritania
- reclamation, development projects 8535
- sclerophyllous scrub, climatic change, degradation 7296

Mauritius, essential oils, *Eucalyptus kirtoniana,* foliage 6440

Maytenus boaria, chemotaxonomy, Chile 4744

Maytenus heterophylla, vegetation types, forests, synecology, South Africa 5451

Maytenus magellanica, chemotaxonomy, Chile 4744

Maytenus senegalensis, medicinal plants, Tanzania 5166

Measurement
- *Chamaecyparis obtusa,* diameter, photography 9572
- climate, equipment, simulation 1609
- data collection, theory 6992
- forest trees
  - equipment, lasers 1852
  - plant anatomy, techniques 2049
  - plant morphology, sampling 6956
  - reaction wood, morphology, development 4584
- growth rings, microscopy, techniques 6815
- instruments, afforestation, slopes, India 1791
- woody plants, plant physiology, stable isotopes 9335

Mechanics, *Populus maximowiczii,* stem form, seedlings, Japan 1231

Mechanization
- forestry machinery, environmental impact, Sweden 5158
- thinning, Sweden 5159

Mecorhis ursulus, insect pests, *Quercus,* Korea Republic, biology 9163

Medicago arborea, provenance, fodder, biomass production, Mediterranean Region 1676

Medicinal plants
- Algeria 7807
- antiprotozoal agents, *Cryptolepis sanguinolenta* 8691
- antiviral properties, broadleaves 8688
- Arab countries, books 3295
- *Aralia elata,* callus, adventitious roots 6053
- books 746, 3299
- broadleaves
  - East Asia, antibacterial properties 1813
  - Tanzania 5166
- *Calophyllum lanigerum,* coumarins 9827
- *Camptotheca acuminata*
  - reviews
    - China 7618
    - USA 7618
- Caribbean, antioxidant properties 6954
- *Cassia abbreviata,* Tanzania, plant composition 9565
- China
  - books 5931
  - cultural methods, books 1601
- collection, *Shorea robusta,* forests, India 6154
- cytotoxicity, *Abies pinsapo,* wood chemistry, lignans 5400
- *Daniellia oliveri* 8689
- *Eremophila,* Australia 3472
- ethnobotany
  - Belize, books 745
  - books, conferences 748
  - Brazil 6153
  - Burundi, surveys 980
  - edible species, India 984
  - Europe, history, conferences 5937
  - Guatemala 983
  - India 202, 985, 6152, 6155, 7806
    - surveys 199
  - Namibia 982
  - Sabah, methodology 7811
  - São Tomé and Príncipe 4374
  - South Africa 981
  - surveys, India 7810
- Fabaceae, bark, ethnobotany, India 4373
- flavonoids, interactions, reviews 9815
- forest trees
  - Africa 200
  - ethnobotany, India, surveys 198
  - South America 200
  - tissue culture, metabolites, books 749
  - Zaire 7808
- Germany, books 2444-2445
- *Ginkgo biloba,* endangered species 209
- Guinea, books 2446
- haematological properties, *Rhus javanica* 8690
- India, antiviral properties 6953
- Madeira 7809
- *Madhuca longifolia,* flowering, fruiting, India 988
- Mali 3299
- *Malouetia,* alkaloids 422
- *Melaleuca alternifolia,* essential oils, reviews 206
- Mexico 205
- multipurpose trees, degraded forests, Sri Lanka 5851
- Nepal 3471
- Nigeria 201
- *Nyctanthes arbor-tristis,* ethnobotany, India 8687
- Pakistan 3473
- *Piper chaba,* bark, Bangladesh, plant composition 9816
- plant composition, Togo, flavonoids 979
- Portugal 7809
- Rwanda 6952
- *Sapindus saponaria,* fruits, Brazil, saponins 9798
- *Strychnos nux-vomica,* callus, indole alkaloids 9564
- surveys
  - ethnobotany
    - Sabah 2674, 9566
    - Sarawak 2675
- Tanzania 2676
- *Taxus*
  - forest nurseries, USA, prunings disposal 4308

Medicinal plants *cont.*
- *Taxus cont.*
  - reviews, taxol 208
  - taxol
    - analytical methods 1811
    - biosynthesis, hydroponics 2679
- *Taxus baccata*
  - bark, plant composition, taxol, seasonal variation 8685
  - taxol 8684
- *Taxus brevifolia*
  - bark, USA, taxane 417
  - endangered species 209
  - foliage, USA, taxane 417
  - plant composition, taxol, biosynthesis 3011
  - taxol, analytical methods 1812
- *Taxus cuspidata,* diterpenoids 9813
- *Tectona grandis,* forests, synecology, Indonesia 1808
- valuation, tropical forests, nature conservation 9569
- *Zanthoxylum zanthoxyloides,* tissue culture, callus, metabolites, isoquinoline alkaloids 2579

Mediterranean Region
- agroforestry 5881
  - environmental factors 10111
  - equilibrium 5887
- *Atriplex halimus,* provenance, fodder, biomass production 1676
- broadleaves, browse, phenolic compounds, techniques 437
- coppice, stand improvement, conferences 8486
- forest fires 365
- forest litter, decomposition, leaching 7916
- forest management, biodiversity, nature conservation, reviews 8438
- forest plantations, forest management, biodiversity 2640
- forestry
  - research
    - genetic resources 3970
    - international organizations 3342
- *Medicago arborea,* provenance, fodder, biomass production 1676
- *Pinus,* seed germination, fire ecology 8947
- *Quercus,* dendroclimatology 3288
- vegetation, ecology, management, conferences 776

Megacyllene spinifera, insect pests, Argentina 2301

Megalopyge uruguayensis, insect pests, Argentina 2301

Megastigmus bipunctatus, insect pests, *Juniperus communis,* Russia 664

Megastigmus spermotrophus, insect pests, *Pseudotsuga menziesii,* Poland, chemical control 2376

Meiosis, Fabaceae, plant morphology, India, variation 4650

Melaleuca
- genetic resources, afforestation, Vietnam 3990
- species trials, saline soils, reclamation, Pakistan 6014

Melaleuca alternifolia
- chloroplast genetics 5564
- genetic variation, essential oils, Australia 2220
- medicinal plants, essential oils, reviews 206

Melaleuca bracteata
- species trials
  - salt tolerance
    - Australia
      - growth 5052
      - survival 5052

Melaleuca cajuputi, genetic resources, afforestation, Vietnam 3990

Melaleuca ericifolia, agroforestry, groundwater, Australia 7579

Melaleuca halmaturorum, plant water relations, Australia 9717

Melaleuca leucadendron, rhizosphere, soil biology, microorganisms, Cuba 1107

Melaleuca linariifolia
- chloroplast genetics 5564

Melaleuca linariifolia *cont.*
- tree guards, seedling growth, Australia 5129

Melaleuca preissiana, seed germination, temperature 76

Melaleuca quinquenervia
- insect pests, *Oxyops vitiosa,* USA, biological control 6933
- seeds, chemotaxonomy, Madagascar 9891
- wildlife, birds, Australia, urban areas 4052

Melaleuca squarrosa, foliage, optical properties, Australia 6222

Melaleuca styphelioides, agroforestry, groundwater, Australia 7579

Melaleuca viridiflora, controlled burning, stand structure, epiphytes, Australia 3089

Melampsora
- fungal diseases
  - *Populus,* Belgium, research 611
  - *Populus trichocarpa,* tree breeding, resistance 3999
  - *Salix,* hybrids, resistance 5524
  - *Salix burjatica,* UK 2276
  - *Salix viminalis,* UK 5647

Melampsora allii-populina, fungal diseases, *Populus,* Portugal, control 7411

Melampsora epitea, fungal diseases, *Salix viminalis,* UK 5647

Melampsora larici-populina
- conifers, USA 5659
- fungal diseases
  - *Populus*
    - France, identification 10013
    - plant physiology, resistance 1463
    - Portugal, control 7411

Melampsora medusae
- fungal diseases
  - conifers, USA 5659
  - *Populus*
    - genetic resistance 5517
    - Portugal, control 7411
    - USA, mortality 4871
  - *Populus deltoides,* genetic variation, resistance 4873

Melampsora pinitorqua (*see Melampsora populnea*)

Melampsora populnea
- fungal diseases
  - *Pinus pinaster,* phenology, provenance, host parasite relationships 4256
  - *Populus tremula,* Italy 609

Melampsora ribesii-viminalis, fungal diseases, *Salix viminalis,* UK 5647

Melampsoridium betulinum, fungal diseases, *Betula tortuosa,* Finland, acid deposition, heavy metals 5652

Melanerpes carolinus, birds, feeding behaviour, dead trees, bottomland forests, USA 6680

Melanerpes erythrocephalus, birds, feeding behaviour, dead trees, bottomland forests, USA 6680

Melastoma malabathricum, photosynthesis, Singapore 6467

Melastomataceae, rain forests, botanical composition, soil types, Peru 3940

Melia azedarach
- branching, habit, India 2037
- forest nurseries
  - Nepal, planting stock, production costs 9480
  - sowing depth, India 904
- mycoplasmal diseases, Argentina, control 1466
- seed germination, seed treatment 85
- wood anatomy, Indonesia 6407

Meliaceae
- epidermis, morphology, West Africa 394
- genetic variation, geographical distribution, genetic markers 5528
- rain forests
  - canopy gaps, photoinhibition, Papua New Guinea 1287
  - species diversity, forest litter, measurement, Sabah 2823

Melicope, taxonomy, Borneo 7231

Melicytus flexuosus, taxonomy, New Zealand, new species 3847

Melocanna baccifera, bamboos, stems, morphology, age, Bangladesh 6419
Meloidogyne
  plant parasitic nematodes
    Acer, USA, resistance 3189
    Catalpa, control 2384
    Cercis, susceptibility 5773
    Quercus, USA, susceptibility 3188
    shade trees, crops, Cuba 1496
Meloidogyne incognita, plant parasitic nematodes, *Leucaena leucocephala,* India 1497
Meloidogyne javanica, plant parasitic nematodes, *Leucaena leucocephala,* India 1497
Mensuration
  books 3298
  equipment, lasers, economic evaluation, USA 9573
  Larix gmelinii, Russia, statistical analysis 2681
  Nothofagus pumilio, silviculture, synecology, Chile, reviews 955
  remote sensing, infrared photography, Croatia 4453
  terminology, Australia 6796
Merobruchus major, insect pests, *Pithecellobium ebano,* seeds, damage, Mexico 4039
Merostachys, bamboos, taxonomy, Brazil 6519
Mesua, shelterwood system, natural regeneration, sustainability, Sri Lanka 921
Metabolism, *Acer pseudoplatanus,* carotenoids, iron, deficiency 6472
Metabolites, enzymes, *Picea abies,* cell culture 6885
Metabolus flavescens, insect pests, *Ginkgo biloba,* China 7483
Metallurgy, forestry, history, Germany 6722
Metasequoia glyptostroboides
  bark, chemistry, proteins 3786
  street trees, microclimate, noise abatement, China 10156
  wood chemistry, proteins 3786
Methodology
  agroforestry
    development, indigenous knowledge 10103
    indigenous knowledge, data collection, Rwanda 10105
  equipment, air pollution, ozone 23
  experimental plots 7659
  natural regeneration, measurement, data analysis, Argentina 5943
  radon, soil air, soil compaction 5949
  Salix viminalis, genetic defects, mathematics 589
Metrosideros excelsa
  fungal diseases, *Dothiorella,* New Zealand 4075
  insect pests, *Neomycta rubida,* New Zealand, damage 4075
  mammals, *Trichosurus vulpecula,* New Zealand, damage 4075
Metrosideros polymorpha
  foliage, morphology, USA 2951
  forest litter, decomposition, USA, site factors 4492
  nutrient deficiencies, phosphorus, fertilizers, USA 9461
  plant nutrition, soil chemistry, Hawaii, chronosequences 6287
  plant succession
    volcanic soils, nitrogen fixation, USA 2827
    water stress, USA 1398
  seed germination 1311
  soil chemistry, phosphorus, forest litter, USA 7882
  stand characteristics, population dynamics, evolution, USA 3989
Metrosideros umbellata, marsupials, *Trichosurus vulpecula,* remote sensing, New Zealand, damage 471
Metroxylon sagu, edible species, Indonesia 1809
Metteniusa cogolloi, taxonomy, Colombia 492
Mexico
  Abies religiosa, forest management, nature conservation, rural economy, simulation 3280
  Acacia farnesiana, precipitation, canopy, simulation 2398
  agroforestry, history, reviews 4111
  Arecaceae, stand characteristics, forest management, sustainability 7327
  Beilschmiedia angustielliptica, taxonomy 6517
  birds, seasonal migration, rain forests, habitat selection 9212
  broadleaves
    light, canopy gaps, crown 7023
    rain forests, wood anatomy 1211
  Brosimum alicastrum, synecology, species diversity, recruitment, seed predation 1406
  Bursera microphylla, palaeobotany, pollen analysis 8147
  Caesalpinia coccinea, taxonomy, new species 8961
  Cecropia obtusifolia
    population genetics, isoenzymes 5538
    seed dispersal, opossums 6506
  Celaenodendron mexicanum, tropical forests, species diversity 2146
  cloud forests, synecology, stand structure, layer structure 7278
  Dahlia, flowers, morphology 1212
  deciduous forests
    deforestation, soil organic matter, carbon cycle 4529
    forest litter 293
  degraded forests, agroforestry 9287
  Diospyros texana, precipitation, canopy, simulation 2398
  edible fungi, Christmas trees, plantations, economics 6955
  Euphorbia tanquahuete, latex, terpenoids, steroids 1242
  Fabaceae, flora, taxonomy, uses 1329
  flora 7244, 7246
  forest economics, forest policy 2776
  forest resources, sustainability 4240
  forest trees, liberation felling, girdling, poisoning 2648
  forests, valuation 9649
  Fouquieria columnaris, palaeobotany, pollen analysis 8147
  fungal diseases
    Fomitopsis pinicola, Abies religiosa 7397
    Heterobasidion annosum, Abies religiosa 7397
  insect pests
    deciduous forests, damage, measurement 6648
    Merobruchus major, Pithecellobium ebano, seeds, damage 4039
    Prostephanus truncatus, broadleaves 7476
    Stator beali, Pithecellobium ebano, seeds, damage 4039
  Juniperus flaccida, increment, variation, mixed forests 226
  Leucaena, taxonomy 8134
  Leucaena leucocephala, genetic variation, isoenzymes 590
  Leucaena leucocephala × *Leucaena esculenta,* hybrids, molecular genetics, identification 2224
  Liquidambar, genetic variation, isoenzymes 586
  lizards, *Xenosaurus grandis,* tropical forests, ecology 6696
  Magnolia schiedeana, reproductive behaviour 2094
  mangroves, geographical distribution 7264
  matorral, surveys 241
  medicinal plants 205
  mistletoes, *Phrygilanthus sonorae, Bursera,* dispersal 2294
  mountain forests
    botanical composition, site factors, statistical analysis 3895
    synecology 3079
  old and fossil wood, Fabaceae, wood anatomy 2022
Mexico *cont.*
  ornamental woody plants 1589
  palaeobotany, Fabaceae 511
  palaeoecology, pollen analysis 8147
  Picea, taxonomy, plant morphology, plant composition 501
  Pinus, seed production 6876
  Pinus cembroides, seeds, genetic variation, fatty acids 424
  Pinus discolor, geographical distribution 6534
  Pinus patula, tree breeding, progeny testing, genetic variation 566
  Pinus pseudostrobus
    increment 6982
      variation, mixed forests 226
  Piper auritum, seed germination, light 3549
  Prosopis laevigata, precipitation, canopy, simulation 2398
  Quercus rubramenta, taxonomy, botany 1323
  rain forests
    agroforestry, synecology, cattle 6736
    canopy gaps, understorey 540
    forest fragmentation, biodiversity, mammals 9205
    ground vegetation 6558
    remote sensing, image processing 2766
    seeds, phenology 473
  shrubs, seed dormancy, temperature, moisture 2575
  soil surveys, matorral 301
  street trees, surveys 4982
  Tamarix, shoot cuttings, shelterbelts, saline soils 7556
  Tapirira chimalapana, taxonomy 8131
  tropical forests
    canopy, light, leaf area index 8756
    epiphytes, arthropods, interactions 6561
  urban forestry 741
    forest influences 1588
  vegetation types, synecology, forest management 4773
  wind damage 1081
  wood anatomy, broadleaves 4629-4630
Michelia, taxonomy 8978
Michelia champaca
  forest nurseries, containers, seedling growth, survival, Bangladesh 6076
  roots, bark, sesquiterpenoid lactones 9805
  tissue culture, callus 87
Michelia nilagirica, foliage, Sri Lanka, chemical composition 3751
Miconia
  choice of species, forestry development, South America 2551
  cloud forests, clear felling, plant succession, Venezuela 5458
Miconia argentea, canopy gaps, transpiration, regulation, Panama 6302
Miconia cabacu, roots, morphology, development 5384
Microbial flora, *Pinus sylvestris,* foliage, roots, Poland 7382
Microclimate
  Azadirachta indica, shelterbelts, crops, Niger 7384, 8383
  broadleaves, agroforestry, soil water, Canada 9278
  Chamaecyparis obtusa
    evapotranspiration, forest influences, Japan 1117
    forest influences, Japan 1189
  Eucalyptus camaldulensis, shelterbelts, Italy, effects 6701
  Eucalyptus globulus, agroforestry, crops, interface, simulation 9357
  Eucalyptus polyanthemos, establishment, shelter, Australia 3442
  evaporation, *Pinus taeda,* shelterwood system, USA, equations 2787
  Fagus sylvatica, transpiration, leaf conductance, equations, Germany 9719
  Gliricidia sepium, agroforestry, Côte d'Ivoire, crops, plant diseases 8431
  Pinus sylvestris
    dunes, plant succession, Netherlands 1401

- **Microclimate** *cont.*
  - *Pinus sylvestris cont.*
    - shelterwood system, Sweden, radiation 3428
  - *Pinus taeda*
    - shelterwood system, plant water relations, USA 5277
    - silvicultural systems, USA 922
  - *Pseudotsuga menziesii*
    - forest borders, USA 5347
    - stand structure, USA 3459
  - *Quercus rubra*, ozone, plant physiology 1965
  - shelterwood system, natural regeneration, Sweden, monitoring, equipment 9333
  - street trees, noise abatement, China 10156
- ***Microdiprion pallipes,*** insect pests, *Pinus*, Sweden 9173
- **Micropropagation**
  - *Eucalyptus*, breeding programmes, pulpwood production, South Africa 552
  - *Pinus*, breeding programmes, pulpwood production, South Africa 552
  - *Pinus brutia* × *Pinus halepensis*, methodology 4273
- **Microrelief,** *Chamaecyparis thyoides*, wetlands, disturbed land, USA 7875
- ***Microsphaera alphitoides,*** fungal diseases, *Quercus robur*, Netherlands, acid deposition 3655
- ***Microsphaera penicillata,*** fungal diseases, *Platanus acerifolia*, USA, disease resistance 2284
- ***Microsphaera syringae,*** fungal diseases, *Syringa vulgaris*, USA, control 4876
- ***Microsphaera vanbruntiana***
  - fungal diseases
    - *Sambucus racemosa*
      - France 5660
      - Spain 5660
- ***Microtropis***
  - taxonomy
    - Sabah 7227
    - Sarawak 7227
- ***Microtus agrestis***
  - *Betula pendula*, browsing damage, Finland, resistance 3221
  - population dynamics, rodents, *Betula pendula*, fodder, Finland 6678
- ***Microtus pennsylvanicus,*** wildlife, forest trees, plant succession, USA 5811
- **Microwave radiation**
  - *Fagus sylvatica*, seedlings 329
  - *Picea abies*, seedlings 329
- **Middle East**
  - agroforestry, history, socioeconomics 5886
  - insect pests
    - *Matsucoccus josephi, Pinus*, geographical distribution 8330
    - *Pineus pini, Pinus*, geographical distribution 8330
- ***Mikania cordata,*** habit, reproductive behaviour 5369
- **Mildews** (*see* Fungal diseases)
- ***Milicia excelsa***
  - insect pests, *Phytolyma lata*, Ghana, resistance, phenotypic variation 10036
  - tissue culture, Ghana 6059
- ***Millettia,*** taxonomy, Madagascar 7236
- ***Millingtonia hortensis,*** seedling growth, photosynthesis, foliage, India 1261
- ***Mimosa chaetocarpa,*** seed dormancy, temperature, moisture, Mexico 2575
- ***Mimosa invisa,*** woody weeds, Papua New Guinea, biological control 1760
- ***Mimosa pigra***
  - weed control, biological control, Australia, beneficial insects, *Mictis profana* 7797
  - woody weeds, seed banks, Australia 8641
- ***Mimosoxylon tenax,*** old and fossil wood, wood anatomy, Mexico 2022
- **Mine spoil**
  - *Acacia auriculiformis*, reclamation, lateritic soils, India 10092
  - afforestation, soil toxicity, Ukraine 10091
- **Mine spoil** *cont.*
  - *Albizia procera*, reclamation, fertilizers, India 9250
  - *Alnus cordata*, reclamation, Italy, symbiosis 2406
  - broadleaves, reclamation, UK, soil amendments 6708
  - multipurpose trees, species trials, reclamation, India 2404, 4949
  - plant succession, USA, riparian vegetation 3950
  - *Quercus alba*, planting stock, reclamation, USA 5849
  - reclamation
    - soil conservation, water conservation, India 713
    - Zimbabwe 7563
  - water pollution, *Pinus taeda*, forest decline, afforestation, USA 2092
- **Mined land**
  - *Acacia*, species trials, reclamation, Peninsular Malaysia 3240
  - *Acacia mangium*, reclamation, species trials, agroforestry, Peninsular Malaysia 3241
  - *Atriplex semibaccata*, reclamation, saline soils, South Africa 8391
  - broadleaves
    - afforestation, reclaimed land, USA 9539
    - Germany, clay soils 1538
    - reclamation
      - tillage, USA 4093
      - USA, establishment 4090
    - species trials, reclamation, Venezuela 6711
  - *Eucalyptus marginata*, reclamation, understorey, Australia 1542
  - exotics, reclamation, Venezuela 6711
  - forest trees, mycorrhizas, reclamation, Australia 5590
  - *Leucaena*, species trials, reclamation, Peninsular Malaysia 3240
  - multipurpose trees
    - reclamation
      - India, economics 3248
      - species trials, India 3246
      - Thailand 3243
    - species trials, reclamation, Cuba 1540
  - *Paraserianthes falcataria*, reclamation, species trials, agroforestry, Peninsular Malaysia 3241
  - plant succession, trees, USA 3948
  - *Quercus virginiana*, irrigation, USA, reclamation 4091
  - reclamation
    - national parks, Christmas Island, birds, conservation 3234
    - Peninsular Malaysia 3239
    - plant succession, USA, botanical composition 4094
    - techniques, India 6706
    - USA 3231
  - *Salix alaxensis*, reclamation, USA 3230
- **Minor forest products** (*see also* Non-wood forest products)
  - collection
    - forest management, women, indigenous knowledge, India 6846
    - rural economy, India, tribes 8672
  - conferences 8479
  - multipurpose trees, social forestry, India, conferences 14
  - *Pinus*, exotics, species trials, India, reviews 6870
- ***Minquartia guianensis***
  - increment, diameter, Costa Rica, variation, climate 1841
  - respiration, Costa Rica 8929
- ***Miscanthus,*** wood chemistry, sugars 4668
- ***Miscanthus sinensis,*** humus, formation, volcanic soils, Japan 5261
- **Mist** (*see* Fog)
  - traps, design, Arid Regions, Chile 940
- **Mistletoes**
  - *Amyema miquelii*
    - *Eucalyptus*, Australia, control 4879
    - *Eucalyptus salmonophloia*, Australia, spatial distribution 7413
- **Mistletoes** *cont.*
  - *Amyema preissii*, broadleaves, host parasite relationships, seed germination, seedling growth 5674
  - *Arceuthobium americanum*
    - *Pinus contorta*
      - oleoresins, increment 7206
      - resistance, *Dendroctonus ponderosae* 7205
  - *Arceuthobium pusillum, Picea rubens*, USA, distribution 616
  - *Dendrophthoe falcata*
    - *Albizia amara*, India 2295
    - forest trees, India 6642
    - forests, India, surveys 2295
    - host plants, reviews 618
  - host parasite relationships, wood anatomy 6641
  - Loranthaceae
    - seed dispersal, forests, Colombia 1469
    - *Tectona grandis*, Indonesia 1468
  - *Loranthus, Quercus*, age of trees, India 617
  - *Lysiana exocarpi*, broadleaves, host parasite relationships, seed germination, seedling growth 5674
  - *Phoradendron juniperinum, Juniperus osteosperma*, plant physiology, USA 3800
  - *Phoradendron macrophyllum, Juglans* 6641
  - *Phrygilanthus sonorae, Bursera*, Mexico, dispersal 2294
  - *Scurrula*, forest trees, India 6642
  - *Tapinanthus, Vitellaria paradoxa*, Burkina Faso 7414-7415
  - *Tapinanthus vittatus, Diplorhynchus condylocarpon*, photosynthesis, Zimbabwe 4026
  - *Viscum orientale, Albizia amara*, India 2295
- **Mites**
  - *Aceria bezzii, Celtis australis*, Italy, buds, damage 668
  - *Aceria dioicae, Tamarix nilotica*, Egypt, galls 9177
  - *Dicruvasates tamaricis, Tamarix nilotica*, Egypt, galls 9177
  - *Eriophyes*, broadleaves, galls, India 2371
  - *Eurytetranychus buxi, Buxus sempervirens*, Poland 2370
  - *Panonychus citri, Ilex crenata*, habit, Japan, population dynamics 667
  - *Proctolaelaps kirmsei*
    - *Hamelia patens*
      - nectar, consumption, Costa Rica 10051
      - pollen, consumption, Costa Rica 10052
  - *Viburnum tinus*, mutualism 622
  - woody plants, foliage, mutualism, Korea Republic 3172
- **Mitochondria,** *Pinus sylvestris*, enzymes 5414
- ***Mitragyna rotundifolia,*** flora, India 7253
- **Mixtures**
  - *Betula papyrifera*, increment, Canada 4361
  - broadleaves, forest plantations, Italy, growth 8626
  - conifers
    - growth models, Japan 2700
    - site class assessment, yield forecasting, Canada 5177
  - forest plantations, Ukraine 1783
  - forest trees, silvicultural conversion, Austria 6940
  - *Larix leptolepis*, increment, Germany 9593
  - *Larix sibirica*
    - *Betula pendula*, root systems, plant competition, Russia 2656
    - *Picea abies*, root systems, plant competition, Russia 2656
    - *Pinus sylvestris*, root systems, plant competition, Russia 2656
  - *Leucaena leucocephala*
    - *Diospyros celebica*
      - Indonesia
        - growth 1788

- **Mixtures** *cont.*
  - *Leucaena leucocephala cont.*
    - *Diospyros celebica cont.*
      - Indonesia *cont.*
        - spacing 1788
    - *Swietenia macrophylla*
      - Indonesia
        - growth 1788
        - spacing 1788
  - mountain forests, artificial regeneration, Germany 948
  - *Picea abies,* increment, Finland, simulation 3462
  - *Pinus banksiana,* increment, Canada 4361
  - *Pinus koraiensis,* silviculture, Russia 9542
  - *Pinus sylvestris,* increment, Finland, simulation 3462
  - *Populus tremuloides,* increment, Canada 4361
  - *Quercus robur*
    - silviculture, Ukraine 1785
    - UK, growth, *Larix decidua, Picea abies* 5155
  - silviculture, Switzerland 178
  - stand structure, simulation, Germany 9581
- ***Mnesampela privata***
  - insect pests
    - *Eucalyptus,* provenance, Australia, resistance 4031
    - *Eucalyptus globulus,* provenance trials, Australia 2554
- **Models,** forest resources, forest policy, forest management, sustainability 5190
- **Moldova**
  - amenity and recreation areas, veteran or remarkable trees 6757
  - *Quercus robur,* population genetics, foliage, morphology 9054
- **Mongolia,** *Ulmus pumila,* autecology 8181
- **Monkeys**
  - *Alouatta seniculus, Chrysophyllum lucentifolium,* seed dispersal, French Guiana, interactions 7541
  - *Cacajao calvus,* Brazil, *Eschweilera albiflora,* seed predation, seed dispersal 3115
  - *Cebus apella, Cariniana micrantha,* seed predation, Brazil 474
  - *Cercopithecus aethiops,* seed dispersal, forests, reclamation, South Africa 3211
  - *Daniellia pynaertii,* pollination, Zaire 4737
  - *Macaca fuscata,* broadleaves, seed production, Japan 689
  - primates, feeding behaviour, Caesalpinioideae, rain forests, Zaire 9218
- ***Monochamus alternatus***
  - insect pests
    - *Pinus*
      - biology 661
      - Japan
        - biological control, entomogenous fungi 2377
        - laboratory rearing 10047
    - *Pinus densiflora,* Japan, biology 5755
    - *Pinus thunbergii,* Japan, control 7480
- ***Monochamus saltuarius***
  - insect pests
    - *Pinus banksiana,* China 5740
    - *Pinus densiflora,* Japan, biology, seasonal behaviour 4888
- ***Monochamus sutor***
  - insect pests
    - *Picea abies,* plant parasitic nematodes 1495
    - *Pinus sylvestris,* plant parasitic nematodes 1495
- ***Monochamus urussovii,*** insect pests, *Abies sibirica,* disease vectors, Deuteromycotina 10046
- **Monographs**
  - *Cedrus deodara,* India 2454
  - forest trees 2
  - woody plants 2
- ***Monotoca scoparia,*** sclerophyllous forests, natural regeneration, fungal diseases,
- ***Monotoca scoparia,*** sclerophyllous forests, natural regeneration, fungal diseases, *cont.*
  - *Phytophthora cinnamomi,* Australia 3954
- **Montenegro,** essential oils, *Eucalyptus globulus* 6437
- **Moose** (*see Alces alces*)
- **Mor** (*see* Humus)
- ***Mora excelsa***
  - flooding tolerance, drought resistance, plant water relations, Guyana 9716
  - photosynthesis, soil fertility, Guyana 7193
- ***Mora gonggrijpii***
  - flooding tolerance, drought resistance, plant water relations, Guyana 9716
  - seedling growth, plant water relations, light, Guyana 1222
- ***Morchella***
  - edible fungi
    - *Abies alba,* Spain, ecology 2677
    - *Pinus,* Spain, ecology 2677
- ***Morchella esculenta,*** mycorrhizas, *Picea abies* 597
- ***Morinda tinctoria,*** cambium, cell division, seasonal variation 4644
- ***Moringa oleifera***
  - fungal diseases, *Fusarium pallidoroseum,* India 8303
  - multipurpose trees, fibre plants, India 2678
- ***Morisonia americana***
  - foliage, development, chemistry, photosynthesis, Venezuela 1264
  - plant water relations, drought resistance, Venezuela 3594
- **Morocco**
  - *Acacia,* vegetation types 9921
  - *Argania spinosa,* multipurpose trees 3702
  - *Juniperus thurifera,* forest management, sustainability 1015
  - mountain forests, matorral, synecology, desertification 3939
  - *Pinus pinaster,* taper, site factors 8862
  - *Quercus pyrenaica,* bioclimate 1876
  - scrub, fuelwood, environmental degradation 7111
- **Morphogenesis**
  - forest trees
    - dwarfism
      - seedlings 6397
      - witches' brooms 6397
- **Morphology** (*see* Plant morphology)
  - *Betula tortuosa,* foliage, Finland, variation 2933
- **Mortality** (*see* Stand characteristics, mortality)
- ***Morus***
  - agroforestry, sericulture, India 2412
  - insect pests, *Maconellicoccus hirsutus,* Indonesia, control 2378
- ***Morus alba***
  - branching, habit, India 2037
  - mycorrhizas, *Glomus,* phosphorus fertilizers, foliage, quality 7802
  - phosphorus fertilizers
    - foliage
      - mycorrhizas, India 7802
      - silkworms, India 7802
  - plantations, increment, Azerbaijan 1004
  - pollen, allergens 6442
  - street trees, drought tolerance, USA, testing 4509
- ***Morus atropurpurea,*** tree breeding, polyploidy, China 7373
- ***Morus australis,*** nutrient uptake, weed control, India 8642
- ***Morus bombycis***
  - artificial seeds, tissue culture, techniques 6042
  - frost resistance, seasonal variation, plant anatomy, plasma membranes 2805
- ***Morus cathayana,*** agroforestry, sericulture, Indonesia 1805
- ***Morus indica,*** artificial seeds, tissue culture, techniques 6042
- ***Morus laevigata,*** tissue culture, explants, micropropagation 2594
- ***Morus multicaulis,*** artificial seeds, tissue culture, techniques 6042
- ***Morus nigra,*** nitrogen fertilizers, foliage, biomass production, India 7801
- ***Morus rubra,*** molecular genetics, RNA 3988
- ***Mosquitoxylum jamaicense,*** rain forests, Mexico, wood anatomy 1211
- **Mosses**
  - boreal forests, Estonia 3944
  - forests, pollen analysis, dispersal, USA 3040
  - *Picea abies,* subalpine forests, natural regeneration, Switzerland 6555
- **Mountain areas**
  - environmental management, sustainability, Asia, books 2453
  - landscape, remote sensing, Italy, methodology 6715
- **Mountains**
  - plant succession, riparian forests, India 3949
  - satellites, surveying 6231
- ***Mouriri huberi,*** wood anatomy, wood properties 6428
- **Mozambique,** forestry, forest administration, forest economics 2775
- **Mulches**
  - broadleaves, herbicides, plant nutrition, Canada 5135
  - decomposition
    - *Cassia spectabilis,* agroforestry, Philippines 2418
    - *Gliricidia sepium,* agroforestry, Philippines 2418
    - nutrients, multipurpose trees, agroforestry, Togo 8422
    - *Robinia pseudoacacia,* agroforestry, USA 9276
- **Mulching**
  - *Acer saccharum,* roots, plant water relations, USA 4300
  - broadleaves, cover crops, USA 5113
  - forest trees, fertilizers, seedling growth, Canada 6116
  - *Pinus roxburghii,* eroded soils, nitrogen-phosphorus fertilizers, India 130
- **Mull** (*see* Humus)
- **Multipurpose trees** (*see also* Nitrogen fixing trees)
  - *Acacia,* biology, utilization, research, Tropics 185
  - *Acacia catechu,* monographs 6771
  - *Acacia nilotica* 2007
  - *Acacia saligna* 1204
  - *Acacia xanthophloea,* allelopathy, crops 8176
  - afforestation, waste land, soil organic matter, carbon cycle, India 7561
  - agroforestry
    - biomass production, cycling, India 8432
    - choice of species, development projects, Cameroon 6734
    - development projects, reclamation, degraded forests, Thailand 3242
    - India 10107
      - conferences 2463
    - lac, China 978
    - land use, Côte d'Ivoire 8423
    - pruning, root systems, plant competition, Indonesia 10102
    - range management, research, India 10114
    - reclamation, waste land, India, books 6773
    - species trials, Rwanda 4961
  - allelopathy, foliage, extracts 3106
  - *Argania spinosa,* Morocco 3702
  - *Azadirachta indica,* indigenous knowledge, Kenya 6384
  - biomass production, India, equations 789
  - browse plants, insect pests, Nigeria 8325
  - *Casuarina,* books 2448
  - choice of species
    - Asia, reviews 1656
    - farm forestry, Bangladesh 6716
    - selection criteria, tree breeding, research, West Africa 8186
  - computer software, databases, decision making 4227
  - development projects, international cooperation, Thailand, reports 760

Multipurpose trees *cont.*
  direct sowing, establishment, contour cultivation, erosion control, Nicaragua 4945
  farm forestry
    choice of species, direct sowing, Australia 10121
    soil fertility, India 2902
  fibre plants, broadleaves, India 2678
  Ficus carica, Pakistan, plant composition, utilization 8908
  fodder
    choice of species, Nepal 6948
    conferences 8489
    Nepal, conferences 2461
  foliage, chemistry, fodder, India 7170
  forest nurseries, Nepal, planting stock, production costs 9480
  fuel plantations
    irrigated stands
      biomass production, water use efficiency, Kenya 6021
      stand density, increment, Kenya 6131
  green manures
    Burundi 8679
    Swietenia macrophylla, seedling growth, Indonesia 1711
  Grevillea robusta, silviculture, tree breeding, agroforestry, conferences 2462
  Hyphaene thebaica, Africa, Arid Regions 8037
  inventories, shade trees, plantations, Côte d'Ivoire 4116
  Juglans nigra, tree breeding, NPK fertilizers, USA 9055
  minor forest products, social forestry, India, conferences 14
  Pithecellobium dulce 2006
  planting, rangelands, soil types, Tunisia 8420
  Prosopis juliflora, indigenous knowledge, Kenya 6384
  Pterocarpus indicus 1203
  reclamation
    degraded forests
      development, Indonesia 7560
      India 9249
    eroded soils, community forestry, choice of species, Indonesia 3237
    mined land
      India, economics 3248
      species trials, India 3246
      Thailand 3243
  root systems, methodology, mathematical models 7666
  seed germination
    seed treatment 85
      India 858
  seedling growth
    symbiosis
      Bradyrhizobium japonicum, nitrogen fixation 3151
      Rhizobium, nitrogen fixation 3151
  seeds
    storage, seed germination, reclamation, India 79
    training, handbooks 2533-2534
  shelterbelts, species trials, soil properties, India 3689
  shoot cuttings, India 105
  spacing, biomass production, India 1779
  species trials
    agroforestry
      acid soils, Cameroon 2542
      soil properties, soil types, Nigeria 6868
    fodder, production, Indonesia 3371
    fuel plantations, Nepal 6865
    India 1664, 1673
    Puerto Rico 1666
    reclamation
      desert soils, Egypt 3372
      fly ash, India 9248
      mine spoil, India 2404, 4949
      mined land, Cuba 1540
      sodic soils, India 712
    saline soils, reclamation, Pakistan 6014
Multipurpose trees *cont.*
  species trials *cont.*
      shelterbelts, irrigation, saline water, Saudi Arabia 2559
    Zaire 8566
  support trees, crops 9269
  surveys, Asia, trees, products, utilization 1548
  ultisols, fertilizers, seed size, pot experimentation 7758
  vegetative propagation, indigenous knowledge, Nepal 6883
  water harvesting, savanna woodlands, rehabilitation, Kenya 6120
  water management, saline water, agricultural land, USA 5866
Muntiacus reevesi, deer, UK, habitats, spread 10073
Muntingia calabura, seed germination, plant growth regulators, temperature, light 9440
Murraya paniculata
  insect pests, *Amblypelta lutescens,* Australia, parasitoids 2311
  liberation felling, Mexico, girdling, poisoning 2648
Musa, agroforestry, biomass production, cycling, India 8432
Mutualism
  insects, *Pseudomyrmex concolor, Tachigali myrmecophila,* Brazil 2296
  mites
    Viburnum tinus 622
    woody plants, foliage, Korea Republic 3172
  Neonauclea celebica, Formicidae, Indonesia 10027
  Neonauclea cyrtopoda, Formicidae, Indonesia 10027
Myanmar, *Tectona grandis,* taungya, history, sociology 9266
Mycoplasma-like organisms, *Quercus robur,* Germany 2291
Mycoplasmal diseases
  Alnus, Italy 5668
  Cordyline australis, New Zealand 4875
  Fraxinus, reviews 7408
  Fraxinus americana
    USA
      chemical control 10022
      epidemiology 5672
      forest management 614
  Hovenia tomentosa, Japan, damage 4874
  Melia azedarach, Argentina, control 1466
  Paulownia, tissue culture 5669
  Quercus, forest decline, Austria, phloem 8115
  Ulmus minor, witches' brooms, Italy 5670
Mycorrhizal fungi
  coniferous forests, Norway, relationships, layer structure 9990
  Pinus contorta, symbiosis, Orchidaceae 9996
Mycorrhizas
  Abies, thinning, controlled burning, USA 3145
  Abies alba, fertilizers, lime, soil chemistry, Romania 1715
  Acacia, Africa, conferences, research 6807
  Acaulospora, Cordia alliodora, seedling growth 1444
  Acaulospora excavata, Terminalia, Côte d'Ivoire 600
  Acaulospora laevis
    Calamus manan, planting stock, Malaysia 975
    Leucaena leucocephala, seedling growth 1442
  Acer saccharum
    seedlings, soil arthropods, forest litter, pot experimentation 8262
    soil biology, arthropods, Canada 7928
  acid deposition, forest ecology, interactions, reviews 8840
  Afzelia africana, seedlings, carbohydrates 2248
  Amanita, forest trees, Nepal 7386
Mycorrhizas *cont.*
  Amanita muscaria
    Picea abies
      cell culture, plant physiology 447
      induction, cell culture, callus 8258
      seedlings, enzymes 7393
  Basidiomycotina, forest trees 5597
  Boletus, Dipterocarpaceae, nutrient uptake, seedlings 1448
  broadleaves
    nitrogen fixation
      forest nurseries, Ethiopia 1446
      vegetation types 6618
  Casuarina equisetifolia
    rhizosphere, India 3157
    seedling growth 4851
  Cenococcum geophilum
    Picea abies
      enzymes 9993
      protoplasts 9073
      seedlings, enzymes 7393
    Pinus sylvestris, seedlings, nitrogen fertilizers 7392
  colonization, *Picea abies,* seedlings, lime, Sweden 6616
  conifers
    forest nurseries, afforestation, France, plant nutrition 5576
    host specificity 5603
    rhizosphere, protozoa 5606
  Cortinarius hedyaromaticus, Populus tremuloides, USA 601
  Descolea maculata, Eucalyptus globulus, Spain 8277
  development, *Shorea,* light intensity, Indonesia 2229
  Dipterocarpaceae, Indonesia, books 755
  ecology, *Pinus banksiana,* forest fires, Canada 7394
  ectomycorrhizas
    Lactarius, Fagus sylvatica, France, morphology 5578
    Pisolithus tinctorius, Hopea, Peninsular Malaysia, growth 3148
    Shorea, Indonesia, planting stock, inoculation methods 4845
    Suillus luteus, Quercus rubra, forest nurseries, USA 3149
  Elaphomyces, Picea abies, enzymes 9993
  Entrophospora colombiana, Cordia alliodora, seedling growth 1444
  Eucalyptus
    Australia, seasonal variation 5607
    enzymes 5608
  Eucalyptus globulus, nutrient deficiencies, seedling growth 5609
  Eucalyptus tenuiramis, Australia 2244
  Fabaceae, India, surveys 3152
  Fagus, woodlands, Netherlands 9084
  Faidherbia albida, Africa, conferences, research 6807
  flavonoids, interactions, reviews 9815
  forest nurseries, *Picea sitchensis,* Irish Republic 8279
  forest plantations, tissue culture, Asia, conferences 8483
  forest trees
    Belgium, seasonal variation 1445
    chemistry 8274
    epiphytes, USA 9080
    forest ecology, USA 6610
    plant nutrition
      metal tolerance 8276
      nitrogen 8273
    reclamation, mined land, Australia 5590
    Taiwan 3158
  Gigaspora, Acacia nilotica, seedling growth, root nodules, nitrogen-phosphorus fertilizers 7385
  Gigaspora margarita
    Leucaena leucocephala
      plant nutrition, nutrient uptake 6614
      seedling growth 1442
  Gigaspora rosea, Prunus avium, micropropagation 5593
  Glomus
    Acacia nilotica, seedling growth, root nodules, nitrogen-phosphorus fertilizers 7385

- **Mycorrhizas** *cont.*
  - *Glomus cont.*
    - *Alnus cordata,* interactions, nitrogen fixing bacteria, *Frankia* 9079
    - *Calamus manan,* planting stock, Malaysia 975
    - *Casuarina equisetifolia* 5600
      - forest plantations, age, India 6617
    - *Cordia alliodora,* seedling growth 1444
    - *Erythrina poeppigiana,* plant nutrition, nitrogen 5596
    - Fabaceae, seedling growth, India 3153
    - *Fraxinus excelsior,* micropropagation 5593
    - *Leucaena leucocephala,* seedling growth 1442
    - *Morus alba,* phosphorus fertilizers, foliage, quality 7802
    - *Pithecellobium dulce,* seedling growth 2239
    - *Prunus avium,* micropropagation 5593
  - *Glomus aggregatum*
    - *Albizia ferruginea,* plant nutrition, phosphorus 5612
    - *Azadirachta indica,* inoculation 4012
    - *Bactris gasipaes,* seedling growth 2250
    - *Enterolobium cyclocarpum,* plant nutrition, phosphorus 5612
  - *Glomus etunicatum*
    - *Eucalyptus grandis,* pesticides, toxicity 602
    - *Leucaena leucocephala,* plant nutrition, nutrient uptake 6614
  - *Glomus fasciculatum*
    - *Casuarina equisetifolia,* roots, colonization 4011
    - *Leucaena leucocephala,* plant nutrition, nutrient uptake 6614
  - *Glomus intraradices*
    - *Argania spinosa*
      - micropropagation
        - biomass production 3146
        - plant nutrition 3147
  - *Glomus macrocarpum, Leucaena leucocephala,* rhizosphere fungi 5605
  - *Glomus mosseae*
    - conifers, inoculation 9076
    - *Populus* 'Beaupré', roots, longevity 10000
  - *Hebeloma crustuliniforme*
    - *Picea abies*
      - cell culture, plant physiology 447
      - induction, cell culture, callus 8258
      - plant nutrition 5569
    - *Pinus ponderosa,* roots, translocation 4004
  - *Hebeloma cylindrosporum*
    - *Pinus,* seedlings, plant growth regulators, IAA 2246
    - *Pinus pinaster*
      - morphology 5584
      - plant growth regulators, IAA 8284
    - *Pinus sylvestris,* tissue culture 1691
    - *Quercus,* morphology 6613
  - *Hopea,* plant nutrition, seedlings 4847
  - *Hydnum, Picea abies,* identification, methodology 9081
  - infection, *Eucalyptus globulus, Pisolithus,* roots, enzymes 3155
  - inoculum, soil types, Costa Rica, bioassays 5271
  - insect pests, *Dioryctria albovittella, Pinus edulis,* soil fertility, interactions 4014
  - Italy, classification, keys, books 8468
  - *Laccaria bicolor*
    - *Pinus pinaster,* planting stock, forest soils, bioassays 5574
    - *Pinus ponderosa,* roots, translocation 4004
    - *Pinus strobus,* photosynthesis 4849
    - *Pinus sylvestris,* plant growth regulators, plant nutrition 3159
    - population genetics, forest trees, USA 9997

- **Mycorrhizas** *cont.*
  - *Laccaria bicolor cont.*
    - *Pseudotsuga menziesii*
      - colonization 9072
      - forest nurseries, persistence 5595
  - *Laccaria fraterna, Acacia nilotica,* seedling growth 8267
  - *Laccaria laccata*
    - *Cistus ladanifer* 9083
    - *Picea abies*
      - France, inoculation methods 4008
      - seedlings, photosynthesis, seasonal variation 2249
    - *Pinus patula,* forest nurseries, seedling growth 4850
    - *Pinus sylvestris*
      - development
        - seedlings
          - *Frankia* 7388
          - soil bacteria 7388
      - heavy metals, toxicity 5601
    - *Pseudotsuga menziesii*
      - enzymes, nitrogen, metabolism 5577
      - forest nurseries, France, assessment 9992
    - *Quercus robur,* carbon dioxide enrichment 5582
  - *Laccaria proxima, Picea sitchensis,* fertilizers, forest nurseries, UK 906
  - *Lactarius,* conifers, host specificity 5572
  - *Lactarius deterrimus, Picea abies,* induction, cell culture, callus 8258
  - *Lactarius lignyotus, Picea abies* 5614
  - *Lactarius piperatus, Picea abies,* seedlings, photosynthesis, seasonal variation 2249
  - *Larix decidua, Laccaria amethystea,* plant composition, phenolic compounds 6623
  - *Leucaena leucocephala*
    - seedling growth
      - photosynthesis 596
      - plant nutrition 596
      - plant water relations 596
  - *Libocedrus decurrens,* soil fungi, forest fires, erosion, USA 2243
  - *Morchella esculenta, Picea abies* 597
  - *Parkia biglobosa*
    - canopy
      - soil fertility
        - Burkina Faso 10101
        - Nigeria 10101
  - *Paxillus involutus*
    - *Betula pendula* 8283
      - biochemistry, proteins 5571
      - reclamation, UK 4096
    - forest trees, soil pH, nutrition physiology 5583
    - *Pinus,* plant nutrition, nitrogen 5604
    - *Pinus resinosa,* genetic transformation 9078
  - physiology, seedlings, colonization, in vitro 9998
  - *Picea abies*
    - air pollution, Sweden 5580
    - fertilizers
      - lime
        - boron fertilizers, Finland 3161
        - *Cenococcum geophilum,* acid soils, Finland 3162
    - Germany 3158
    - nitrogen fertilizers, soil water regimes, Sweden 8260
    - soil fungi, ultrastructure 9082
  - *Piceirhiza nigra, Picea abies,* enzymes 9993
  - *Pinus*
    - plant nutrition, nutrient uptake 8256
    - seedlings, radionuclides, uptake 4007
    - site preparation, burning, Canada 7387
    - Sweden 8259
  - *Pinus contorta*
    - competition 8271
    - synecology, canopy gaps, USA 4013
  - *Pinus halepensis* 8285
    - fertilizers, refuse, Spain 4002
    - Spain, seedling growth 4844
  - *Pinus nigra,* seedlings, disease resistance 9077

- **Mycorrhizas** *cont.*
  - *Pinus patula,* forest plantations, fertilizers, South Africa 4846
  - *Pinus pinaster* 5615
  - *Pinus ponderosa,* forest nurseries, Argentina, seedling growth 4009
  - *Pinus sylvestris*
    - enzymes, ammonium, metabolism 4003
    - Netherlands 9074
    - plant nutrition, nitrogen, seedling growth, enzymes 1140
  - *Pisolithus*
    - *Afzelia quanzensis,* seedlings 9075
    - Australia 8275
    - broadleaves 5610
    - *Eucalyptus grandis,* anatomy, host specificity 4006
  - *Pisolithus tinctorius*
    - *Acacia nilotica,* seedling growth 8267
    - *Eucalyptus*
      - host specificity 5611
      - seedlings, colonization 8281
    - *Eucalyptus globulus*
      - enzymes 8272
      - infection, environmental factors 6615
      - plant physiology 3771
      - roots
        - development, morphology 5573
        - enzymes 3772
      - symbiosis, molecular genetics 5570
    - *Eucalyptus grandis,* biosynthesis, polypeptides 5579
    - *Picea abies,* seedlings, photosynthesis, seasonal variation 2249
    - *Pinus,* seedlings, infection 2247
    - *Pinus echinata,* plant composition, fertilizers 4015
    - *Pinus elliottii,* genetic variation 5598-5599
    - *Pinus monticola,* nutrition physiology 4000
    - *Pinus rigida,* plant competition, USA 9995
    - *Pinus sylvestris,* carbon dioxide enrichment 7390
    - *Pinus taeda*
      - carbon dioxide enrichment, phosphorus 6619
      - nutrition physiology 5585
      - photosynthesis, carbon dioxide enrichment 4696
    - *Quercus,* morphology 6613
    - *Quercus rubra,* plant growth regulators, planting stock 5594
  - plant nutrition, nitrogen, methodology, isotopes 2493
  - *Pseudotsuga menziesii*
    - forest litter
      - decomposition 4005
      - USA 5567
    - planting, soil treatment, USA 3156
    - soil fungi, forest fires, erosion, USA 2243
  - *Quercus,* woodlands, Netherlands 9084
  - *Quercus petraea,* soil chemistry, forest decline, Romania 8773
  - *Rhizopogon,* conifers, host specificity 5602
  - *Rhizopogon vinicolor*
    - *Pinus sylvestris*
      - development
        - seedlings
          - *Frankia* 7388
          - soil bacteria 7388
  - *Rozites*
    - Myrtaceae, forests, Australia 5592
    - *Nothofagus,* forests, Australia 5592
  - *Russula,* Dipterocarpaceae, nutrient uptake, seedlings 1448
  - *Russula ochroleuca, Picea abies,* enzymes 9993
  - *Salix,* Norway 8261
  - *Sciadopitys verticillata,* roots 8282
  - *Sclerocystis rubiformis*
    - *Casuarina equisetifolia,* seedling growth, India 3153

- **Mycorrhizas** *cont.*
  - *Sclerocystis rubiformis cont.*
    - *Leucaena leucocephala,* seedling growth 1442
  - *Scleroderma,* broadleaves 5610
  - *Scleroderma columnara,* Dipterocarpaceae, nutrient uptake, seedlings 1448
  - *Scutellospora calospora, Calamus manan,* planting stock, Malaysia 975
  - soil biology, *Pinus,* Russia, seasonal variation, fertilizers 8802
  - succession, *Pinus sylvestris,* UK 8280
  - *Suillus bovinus*
    - *Pinus,* plant nutrition, nitrogen 5604
    - *Pinus sylvestris,* plant nutrition 5581
  - *Suillus collinitus*
    - *Pinus pinaster*
      - seedlings
        - nutrition physiology 8257
        - rhizosphere, pH 8257
  - *Suillus variegatus*
    - *Picea abies,* induction, cell culture, callus 8258
    - *Pinus sylvestris,* heavy metals, toxicity 5601
  - *Thelephora terrestris*
    - *Pinus patula,* forest nurseries, seedling growth 4850
    - *Pinus sylvestris,* heavy metals, toxicity 5601
  - tropical forests, forest trees, roots, morphology, French Guiana 4640
  - *Tuber*
    - broadleaves, interface, ultrastructure 4001
    - *Corylus avellana*
      - irrigation 5613
      - polyphenols 6611
  - *Tuber magnatum,* broadleaves, Italy 6609
  - *Tylospora, Picea abies,* enzymes 9993
  - vesicular arbuscular mycorrhizas
    - *Acer saccharum,* forest decline, soil chemistry, USA 10001
    - *Glomus, Acacia,* plant nutrition, growth 2233
    - *Glomus intraradices, Prosopis alba,* USA 4843
- ***Mycosphaerella cryptica,*** fungal diseases, *Eucalyptus globulus,* Australia, resistance 4869
- ***Mycosphaerella dearnessii***
  - fungal diseases
    - *Pinus*
      - China, isolates, differentiation 9120
      - USA, isolates, differentiation 9120
    - *Pinus attenuata × Pinus radiata,* France, control 8309
- ***Mycosphaerella heimii,*** fungal diseases, *Eucalyptus,* Madagascar, foliage 7403
- ***Mycosphaerella molleriana,*** fungal diseases, *Eucalyptus globulus,* Australia, resistance 4869
- ***Mycosphaerella pini***
  - fungal diseases
    - *Picea omorika,* Serbia 5653
    - *Pinus radiata*
      - Australia, disease vectors 6664
      - New Zealand 4872
    - *Pseudotsuga menziesii,* Serbia 5653
- ***Mycosphaerella populorum,*** fungal diseases, *Populus* 'DN34', air pollution, ozone, disease resistance 5644
- ***Myllocerus undecimpustulatus,*** insect pests, *Terminalia,* India, chemical control 6668
- **Myoporaceae,** plant composition, secondary metabolites, reviews 3753
- ***Myoporum,*** plant composition, secondary metabolites, reviews 3753
- ***Myrceugenia chrysocarpa,*** rain forests, seed size, recruitment, Chile 7258
- ***Myrcia,*** South America, wood anatomy 6415
- ***Myrcia acuminata,*** cloud forests, clear felling, plant succession, Venezuela 5458
- ***Myrcia fallax,*** cloud forests, clear felling, plant succession, Venezuela 5458
- ***Myrica cerifera***
  - plant succession, islands, formation, USA 8172
  - root nodules
    - *Frankia,* USA 4848
    - histology 5586
    - inoculation 4841
  - thicket, transpiration, USA, simulation 8815
- ***Myrica faya,*** root nodules, *Frankia,* USA 4848
- ***Myrica gale***
  - forests, evapotranspiration, Canada, simulation 7948
  - root nodules, *Frankia,* haemoglobin 8269
- ***Myrica rubra,*** wood anatomy, growth effects 4582
- ***Myristica schleinitzii,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- ***Myrospermum frutescens,*** plant water relations, drought, phenology, Costa Rica 2838
- ***Myrrhidendron donnell-smithii,*** fungal diseases, *Burenia myrrhidendri,* Costa Rica, fruits 9121
- **Myrtaceae**
  - foliage, chemotaxonomy, Australian Oceania, essential oils, chemistry 415
  - genetics, ploidy, reproductive behaviour, natural selection 578
  - mycorrhizas, *Rozites,* forests, Australia 5592
  - taxonomy, Thailand 8972
- ***Myrtus communis,*** seed dispersal, Formicidae, Italy 3830
- ***Naematoloma fasciculare*** (*see Hypholoma fasciculare*)
- ***Nageia,*** foliage, morphology, palaeobotany, taxonomy, Australia 497
- **Namibia**
  - forest trees, utilization, deforestation 8531
  - forestry, research projects, development plans 5038
  - medicinal plants, ethnobotany 982
  - nature conservation, development projects 9299
- **National forests,** land use planning, UK, multiple use 6748
- **National parks**
  - air pollution, damage, USA 8444
  - birds, *Dendrocopos leucotos,* mixed forests, Poland 4064
  - *Carpinus betulus,* degraded forests, synecology, Poland 2140
  - flora, endangered species, conservation, planning, Canary Islands 8440
  - forest fires, USA, damage, effects 7141
  - forest inventories, Vietnam, botanical composition, stand structure 7604
  - forest management, working plans, Germany 9618
  - forests
    - species diversity, Indonesia 2143
    - synecology, maps, Poland 2139
  - Japan, management, planning, administration 7603
  - land use
    - Italy 8481
    - remote sensing, Landsat, Spain 6751
  - landscape ecology, Italy 6750
  - management
    - biodiversity, Nigeria 9305
    - nature conservation, biodiversity, Nepal, buffer zones 8446
  - nature conservation, India 734
  - *Quercus robur,* degraded forests, synecology, Poland 2140
  - rain forests, nature conservation, Guatemala 2425
  - reclamation, mined land, Christmas Island, birds, conservation 3234
  - recreation, regulations, USA, sociology 10132
  - tropical forests, biodiversity, nature conservation, India 5897
  - ungulates, forest trees, forest management, Poland 4058
- **National parks** *cont.*
  - vegetation types
    - nature conservation, Bolivia 5898
    - plant succession, Korea Republic 9302
  - wildlife conservation, public opinion, rural communities, Nepal 8442
  - woodlands, synecology, maps, Poland 1377
- **Natural layering**
  - *Cryptomeria japonica,* light, snow, Japan 4326
  - *Picea abies,* genetics, isoenzymes, subalpine forests, Germany 558
- **Natural regeneration** (*see also* Coppice; Natural layering; Seedlings; Suckering)
  - *Abies pindrow,* canopy, light, Pakistan 5465
  - advance growth
    - conifers
      - growth models, height, Finland 6971
      - increment, USA 152
      - liberation felling, USA 2627
    - logging, Canada, conifers, survival 4581
    - mortality, *Pinus sylvestris,* Sweden 3435
    - *Picea abies,* clear felling, nitrogen fertilizers, Russia 4294
    - *Picea mariana,* height, yield forecasting, Canada 9491
    - *Pinus sylvestris,* Sweden 3436
  - *Albizia zygia,* degraded forests, reclamation, Ghana 8390
  - assessment
    - *Pinus halepensis,* sampling, Italy, statistical analysis 1739
    - *Santalum album,* heartwood, estimation, Indonesia 6162
  - *Avicennia marina,* soil salinity, soil chemistry, light, Australia 3883
  - bamboos, *Dendrocalamus hamiltonii,* shifting cultivation, India 8426
  - *Betula,* farm forestry, artificial regeneration, Sweden 6921
  - *Betula papyrifera,* scarification, USA 939
  - boreal forests, ecotones, *Picea mariana,* Canada, simulation 799
  - bottomland forests
    - USA 551
    - wild pigs, agroforestry, Croatia 3268
  - *Brachystegia manga,* savanna woodlands, soil chemistry, Zambia, charcoal 5239
  - broadleaves
    - canopy gaps, Japan, botanical composition 9021
    - clear felling, species diversity, USA 3121
    - deciduous forests, seed banks, Canada 3119
    - hurricanes, Nicaragua 3438
    - *Pinus sylvestris,* silvicultural conversion, Germany 4322
    - rights of way, cutting frequency, USA 1332
    - seed germination, viability, UK 4750
    - seed production, seed predation, UK 3031
    - selection forests, France, canopy gaps 5124
    - silvicultural conversion, Germany 9493
    - silviculture 8622
    - spoil banks, plant succession, Japan 1741
  - burning, caatinga, Brazil 1559
  - *Callitris intratropica,* fire ecology, Australia 2005
  - canopy gaps
    - broadleaved evergreen forests, stand structure, Japan 8178
    - light intensity, rain forests, Costa Rica 1409
    - rain forests, species diversity, Tropics, reviews 7326
  - *Carpinus betulus,* Germany, silvicultural conversion 4322
  - *Carya tomentosa,* USA 3107

Natural regeneration *cont.*
- *Chamaecyparis obtusa,* Japan, seedbeds 6917
- *Chamaecyparis pisifera,* forest ecology, Japan 4749
- conifers
  - forest fires
    - age of trees, Sweden, history 3064
    - Canada 8882
  - plant succession, Russia 1400
  - silvicultural systems, Canada 8621
  - stand structure, Japan 2168
- control, *Populus tremula,* arboricides, Russia 8635
- coppicing, *Quercus robur,* Russia 4328
- *Dacrydium xanthandrum,* roots, suckering, Sabah 7159
- damage, *Pinus sylvestris,* deer, fungal diseases, Finland 10061
- deciduous forests
  - canopy gaps, USA 8182
  - clear felling, France 3959
  - hurricanes, forest ecology, Madagascar 6268
  - site preparation, herbicides, USA 4341
- deer
  - *Capreolus capreolus, Abies alba,* browsing damage, France 1740
  - *Cervus elaphus, Abies alba,* browsing damage, France 1740
  - *Cervus nippon, Fagus crenata,* Japan, browsing damage 4054
- density
  - *Abies balsamea,* Canada, sampling 2500
  - *Picea mariana,* Canada, sampling 2500
- *Detarium microcarpum,* forest management, development projects, Burkina Faso 8538
- Dipterocarpaceae, shelterwood system, sustainability, Sri Lanka 921
- *Eucalyptus camaldulensis,* soil, India 151
- *Eucalyptus salmonophloia,* seed banks, seed predation, Australia 8141
- *Fagus,* stand structure, aspect, Japan 9001
- *Fagus crenata*
  - canopy gaps, Japan, seed production, seed dispersal 6104
  - seedlings, snow cover, Japan, vertebrate pests 6252
  - seeds, snow cover, Japan, vertebrate pests 6252
  - site preparation, Japan, *Sasa kurilensis,* control 4346
  - stand characteristics, Japan 8985
- *Fagus orientalis,* stand structure, Iran, logging effects 6916
- *Fagus sylvatica*
  - Germany, silvicultural conversion 4322
  - site preparation, seed banks, Denmark 7773
- farmland, surveys, savanna woodlands, Tanzania 3114
- *Ficus,* forest fires 6524
- fires, *Quercus,* USA 3699
- forest fires
  - logging, Ghana 8881
  - Spain, indicator species, small mammals 2393
- forest management, planning, France, methodology 1017
- forest resources, land use, South East Asia 5034
- forest trees
  - clear felling, Sweden 3439
  - hurricanes, Jamaica 1891
  - logging, Canada, microclimate 8623
  - selective felling, stand development, Japan, logging effects 6910
  - stand characteristics, botanical composition, climatic change, Poland 7330
  - stand structure, botanical composition, development, Poland 7329
  - statistical analysis, Germany, spatial distribution 7774

Natural regeneration *cont.*
- forest trees *cont.*
  - synecology, canopy gaps, New Zealand 1413
  - UK, surveys 5440
- forests, synecology, stand structure, India 2167
- *Fraxinus excelsior, Fagus sylvatica,* plant competition, plant water relations, Germany 9781
- fungal diseases
  - *Colletotrichum dematium, Fagus crenata,* Japan 4853
  - *Cronartium ribicola, Pinus albicaulis,* USA 9105
- insect pests, *Choristoneura fumiferana,* forest trees, USA 1487
- *Jacaranda copaia,* secondary forests, stand structure, Peru 6578
- *Julbernardia globiflora,* savanna woodlands, soil chemistry, Zambia, charcoal 5239
- landslides, seed dispersal, wind, altitude, Japan 3226
- *Larix sibirica,* clear felling, biomass production, Russia 9494
- logging, forest management, Canada, decision making 4321
- mangrove forests, increment, diameter, Bangladesh 6177
- measurement, data analysis, *Nothofagus pumilio,* Argentina 5943
- mortality, advance growth, *Fagus sylvatica,* drought, Spain 927
- *Nothofagus,* forest plantations, increment, Chile 6184
- *Nothofagus pumilio,* group fellings, Argentina 1742
- *Picea,* Temperate Zones 3840
- *Picea abies*
  - allelopathy, France, understorey 2162
  - France, reviews 3437
  - shelterwood system
    - artificial regeneration, Sweden 9541
    - Sweden 9488
  - site preparation, soil amendments, France 9492
  - subalpine forests, mosses, Switzerland 6555
- *Picea mariana,* degraded forests, remote sensing, Canada 7838
- *Picea sitchensis,* thinning, USA 928
- *Pinus*
  - forest fires, soil chemistry, USA 381
  - forest plantations, site factors, Japan 7772
  - weed control, woody weeds, USA 1769
- *Pinus clausa,* logging, forest fires, USA 5469
- *Pinus contorta*
  - cones, fire effects, USA 1200
  - fire effects, landscape ecology, USA 1200
- *Pinus echinata,* USA 2464
- *Pinus halepensis,* forest fires, forest management, Israel 9777
- *Pinus nigra,* stand characteristics, silvicultural systems, Italy 3429
- *Pinus palustris,* canopy, USA 4324
- *Pinus strobus,* seed trees, stand characteristics, USA 3094
- *Pinus sylvestris*
  - artificial regeneration, wood properties, increment, Sweden 7120
  - canopy
    - light
      - Finland
        - seedling growth 9664
        - simulation 9664
  - disease resistance, *Heterobasidion annosum,* Poland 1454
  - ground vegetation, allelopathy, seed germination, Sweden 9913
  - light, Spain 926
  - mixed forests, synecology, Poland 8179
  - shelterwood system, site preparation, Poland 6918
  - stand structure, Sweden 7260

Natural regeneration *cont.*
- *Pinus taeda*
  - forest litter, soil properties, USA 9912
  - silvicultural systems, ground vegetation, USA 6099
  - site preparation, USA 4320
- plant succession, grasslands, deciduous forests, Japan, plant ecological groups 9005
- *Populus nigra,* bottomland forests, seed germination, Netherlands 9963
- *Populus tremuloides,* forest litter, site preparation, Canada 3434
- *Prosopis,* wood properties, Argentina 7119
- protection, forest plantations, broadleaved evergreen forests, India 4811
- *Pseudotsuga menziesii*
  - USA, site factors 6103
  - volcanoes, dendrochronology, USA 363
- *Pterocarpus angolensis,* seedling growth, forest nurseries, Tanzania 9479
- *Quercus*
  - clear felling, USA 147
  - understorey
    - canopy, USA 3118
    - Germany, *Pinus sylvestris* 925
  - USA, conferences 2474
- *Quercus douglasii,* drought resistance, plant competition, USA 4517
- *Quercus emoryi,* site types, USA 7325
- *Quercus robur*
  - Croatia 4808
  - Germany, silvicultural conversion 4322
- *Quercus suber,* artificial regeneration, Spain, reviews 7775
- rabbits, *Oryctolagus cuniculus, Acacia oswaldii,* Australia 4928
- rain forests
  - canopy gaps, New Zealand, population dynamics 1393
  - hurricanes, Nicaragua 547
- recruitment
  - environmental factors, mangroves, Belize 6575
  - *Eschweilera albiflora,* Brazil, seed predation, seed dispersal 3115
  - *Eucalyptus salmonophloia,* woodlands, Australia, reproductive behaviour 6573
  - mortality
    - mixed forests, increment, Poland 2163
    - tropical forests, Panama 3120
  - *Pentaspadon motleyi,* rain forests, canopy, Peninsular Malaysia 8183
  - *Quercus robur,* seed production, predation, UK 9023
- *Rhizophora mangle,* silvicultural systems, clear strip felling, Ecuador 9490
- riparian forests, species diversity, stand structure, Brazil 8177
- riparian vegetation, forest influences, streams, USA 2170
- rodents, *Rattus norvegicus,* damage, *Nothofagus,* New Zealand 4756
- Salicaceae, riparian forests, USA, site factors 8393
- *Salix,* bottomland forests, seed germination, Netherlands 9963
- sclerophyllous forests, Australia, fungal diseases, *Phytophthora cinnamomi* 3954
- secondary forests, nature conservation, New Zealand 3869
- seed banks, broadleaves, soil amendments, lime, USA 6898
- seedbeds
  - *Fagus sylvatica,* site factors, light, Denmark 6920
  - *Picea mariana,* Canada 6925
  - *Pinus banksiana,* soil water, light, laboratory tests 9964
  - pneumatophores, swamps, Sarawak 7331
  - wood ash, *Pinus banksiana,* forest fires, Canada 1198

Natural regeneration *cont.*
  - shade, tolerance, foliage, nitrogen, South Africa 5468
  - shelterwood system, microclimate, Sweden, monitoring, equipment 9333
  - site factors
    - *Abies lasiocarpa,* forest fires, climate, USA 1416
    - *Bombax malabaricum,* rain forests, ecotones, Australia 3935
    - boreal forests, Russia, simulation, management 9965
    - *Phylica arborea,* Tristan da Cunha 3837
    - *Phyllocladus aspleniifolius,* stand structure, population ecology, Australia 3953
    - *Sterculia quadrifida,* rain forests, ecotones, Australia 3935
  - subalpine forests
    - canopy gaps, Japan 6523
    - *Picea abies,* allelopathy, mycorrhizas, humus 5270
  - *Taxus baccata,* nature conservation, Germany 2631
  - *Thujopsis dolabrata,* stand structure, Japan, history 3433
  - tropical forests
    - deforestation
      - land use 1415
      - remote sensing, carbon dioxide 1047
    - forest fires, Brazil 377
    - forest management, forest plantations, Bangladesh 6105
    - hurricanes, Guadeloupe 4796
    - seed banks, Colombia 1314
    - silviculture, forest ecology 9009
  - *Tsuga heterophylla,* thinning, USA 928
  - vegetative propagation, *Populus,* Canada 6507
  - vs. artificial regeneration, broadleaves, UK, history 2625
  - wildlife
    - *Aepyceros melampus, Acacia tortilis,* Tanzania 4065
    - crabs, mangroves, Bangladesh 7257
  - wind damage, Caribbean 1082
  - woody plants, artificial regeneration, farm forestry, Australia 7687
  - xerophytes, Arid Regions, stand structure, Madagascar 8998

Natural resources
  - forest management, genetic resources 9030
  - management, planning, uncertainty 8398

Naturalization (*see* Acclimatization)

Nature conservation (*see also* National parks; Wilderness)
  - *Abies religiosa,* forest management, rural economy, simulation, Mexico 3280
  - *Acer pseudoplatanus,* choice of species, UK, reviews 10125
  - *Betula pubescens,* geographical distribution, Greece 1575
  - biodiversity 1572
    - boreal forests, forest management, Scandinavia 3278
    - forest management 4968
    - forest resources, USA 7631
    - Nepal 10127
    - sustainability, forestry, India 4974
    - taxonomy, books, conferences 5921
    - Tropics
      - books 752
      - conferences 752
  - birds
    - history, Czech Republic 6840
    - riparian forests, USA 4127
    - *Strix occidentalis,* forest economics, USA 732
    - *Strix occidentalis caurina,* forest economics, USA 5820
    - *Sula abbotti,* mined land, reclamation, Christmas Island 3234
  - boreal forests, forest management, wildlife, Canada 3500
  - broadleaved evergreen forests, exotics, invasion, Tanzania 1573
  - choice of species, Costa Rica 9423
  - coastal areas, France, administration 736

Nature conservation *cont.*
  - community forestry, mountain forests, biodiversity, Cameroon 9293
  - conifers
    - arboreta, UK 6758
    - deforestation, Chile 3253
  - contracts, forest management, cost analysis, Germany 1582
  - deforestation
    - Developing Countries, external debt 7571
    - Singapore 3873
  - development projects, Tropics 9299
  - endangered species, reserved forests, increment, sample plot technique, Zimbabwe 6816
  - *Eucalyptus,* forest management, Australia 5194
  - *Eucalyptus microcorys,* forest management, Australia 1580
  - flora
    - biodiversity, India 7601
    - species diversity, Spain 8138
  - forest administration
    - Europe 10130
    - Germany 10131
  - forest ecology, mapping, methodology 7003
  - forest economics
    - Australia, cost benefit analysis, methodology 1052
    - valuation
      - Australia 3533
      - simulation models, Norway 5218
  - forest influences, ground vegetation, Germany, weeds, fields 4964
  - forest management
    - biodiversity
      - Cameroon 6196
      - Mediterranean Region, reviews 8438
      - UK 4998
      - USA, reviews 8438
    - conferences 8480
    - coniferous forests, public opinion, Norway 9406
    - planning, Germany 9615
    - Slovenia 2630
    - sustainability 8718
      - climatic change, land use, conferences 19
      - terminology 5935
  - forest policy
    - Australia 2526, 7595
    - forest management, biodiversity, Sweden 9387
    - rain forests, Indonesia 7598
  - forest resources, genetic resources, Brunei Darussalam 4965
  - forest trees
    - arboreta
      - Irish Republic 5003
      - UK 5003
    - biodiversity, tree breeding, Canada, research 3124
    - forest economics, simulation, USA 1870
    - genetic resources, Chile 7335
    - seeds, biodiversity, research institutes, Australia 8549
    - woody weeds, plant succession, old fields, Japan 9019
  - forestry 7599
    - biodiversity 7592
      - Brazil 6838
    - forest administration, New Zealand 7588
    - forest economics 7587
    - forest policy 7597
      - Switzerland 7589
    - genetic resources 7590
    - land use 7586
      - history, Guinea 8537
    - legislation 7591
    - loans 7593
    - sustainability, South Africa 7594
  - forestry development, sustainability, projects 8515, 9371
  - forests
    - biodiversity
      - afforestation, India 4969

Nature conservation *cont.*
  - forests *cont.*
    - biodiversity *cont.*
      - forest plantations, India 4970
    - development projects, Kenya 5896
    - forestry development, Sri Lanka 1579
    - land use, environmental degradation, Sri Lanka 1578
    - sample plot technique, India 4972
    - valuation
      - computer techniques, UK 5892
      - Developing Countries 5967
  - fynbos, South Africa, biodiversity 528
  - heathlands, Europe 3931
  - Jamaica 8443
  - land use
    - biodiversity 7565
    - forest ownership, Australia 6713
  - land use planning, urban areas, Canada 8439
  - landscape, boreal forests, forest management, Canada, simulation 9621
  - *Ledum palustre,* Poland 1576
  - management, biodiversity, wildlife conservation, India 5894
  - mangrove forests
    - biodiversity, India 4971
    - forest recreation, India 3282
    - Thailand 8997
    - utilization, forest management, Indonesia 7019
  - marsupials, *Gymnobelideus leadbeateri,* forest management, Australia 4967
  - medicinal plants, valuation, tropical forests 9569
  - monitoring, ecosystems, forests, experimental plots, Switzerland 10122
  - national parks
    - India 734
    - management, biodiversity, Nepal, buffer zones 8446
    - tropical forests, biodiversity, India 5897
  - *Nothofagus,* forest management, multiple use, New Zealand 6743
  - old-growth forests
    - Canada 6746
    - forest economics, Canada 7015
  - peatlands
    - Europe, books 6781
    - Switzerland, books 6781
  - periodicals 7617
  - *Phylica nitida,* deforestation, grazing, control, Indian Ocean Islands 9297
  - *Pinus sylvestris,* UK 5893
  - *Pinus uncinata,* wetlands, France 3915
  - planning
    - flora, endangered species, national parks, Canary Islands 8440
    - traditional society, rain forests, Pacific Rim 2426
  - primates, forest fragmentation, Brazil 9295
  - projects
    - forest inventories, Kenya 2735-2749
    - rain forests, biodiversity, Cameroon 7600
  - rain forests
    - Amazonia 532
    - forest fragmentation, synecology, Australia 10129
    - forest policy, simulation, Indonesia 6849
    - monkeys, hunting, Latin America 5815
    - nature reserves, Guatemala 2425
    - Peninsular Malaysia 731
    - sustainability, biodiversity, Ecuador 9300
  - secondary forests, natural regeneration, New Zealand 3869
  - silviculture, Sweden 6919
  - sociology, reserved forests, history, Guinea 1634
  - swamps, fishes, species diversity, South East Asia 10080
  - *Taxus baccata*
    - Germany 9778
    - natural regeneration, Germany 2631
  - training, Germany 821

Nature conservation *cont.*
- tropical forests
  - biodiversity 6837
  - books 7626
  - Costa Rica 1581
  - deforestation, biodiversity, China 9006
  - forest management, sustainability, Developing Countries 5857-5858
  - hunting, deforestation, Peru 5812
  - Malaysia 5895
  - nature reserves, Nigeria, agricultural development 7602
  - research, Ecuador 9301
  - wildlife, logging 9296
- valleys, synecology, species diversity, India 3084
- vegetation types
  - biodiversity, Canada 6747
  - national parks, Bolivia 5898
  - sclerophyllous scrub, Australia 7283
  - USA 9298
- virgin forests
  - Puerto Rico 4966
  - UK 735
- *Widdringtonia cedarbergensis,* South Africa 4973
- wilderness, land use, Canada, economic evaluation, simulation 1872
- wildlife
  - forest ecology
    - logging effects, Australia, reviews 4129
    - simulation 3279
  - forestry 7512
    - India 7511
  - India 6673
  - private forestry, France 9202
  - woodlands, UK 3277
- woodlands, UK, reviews 10124

Nature reserves
- birds, *Psittacula krameri,* broadleaved evergreen forests, India 696
- bottomland forests, France, reclamation 3281
- Brazil, design 8441
- controlled burning, fire prevention, decision making, Australia 7134
- environment, research, Germany 5994
- *Fagus sylvatica,* stand structure, Slovenia 2682
- flora, Brazil 9907
- forest management, forest policy, USA 4423
- forest recreation, Costa Rica, valuation 8445
- forest trees, plant competition, Germany 9956
- fragmentation, rain forests, Brazil, plant physiology 3790
- mammals
  - tropical forests
    - India
      - models 10076
      - sampling 10076
- management, degraded forests, Indonesia, simulation 7684
- monitoring, ecosystems, forests, experimental plots, Switzerland 10122
- mountain forests, Sri Lanka 1375
- *Picea abies,* plant succession, Germany 9954
- *Pinus uncinata,* bogs, Germany 9930
- primates, rain forests, forest management, Uganda 4057
- rain forests
  - forest fragmentation, synecology, Australia 10129
  - nature conservation, Guatemala 2425
  - Sri Lanka 5899
  - urban areas, Singapore 10133
- research, history, Germany 9303
- *Shorea robusta,* stand structure, synecology, India 213
- squirrels, *Ratufa macroura,* riparian forests, India 695
- tropical forests, conservation, Nigeria, agricultural development 7602
- vegetation types
  - deciduous forests, Germany 6749

Nature reserves *cont.*
- vegetation types *cont.*
  - Germany 9304

Nauclea diderrichii
- bark, terpenoids 9799
- improvement planting, biomass, Zaire, growth 6981
- spacing, increment, stem form, Cameroon 3458

Naucleopsis mello-barretoi, nomenclature, taxonomy, Brazil 9895

Naucleopsis oblongifolia, nomenclature, taxonomy, Brazil 9895

Naval stores (*see* Resins)

Nectandra ambigens, rain forests, agroforestry, synecology, cattle, Mexico 6736

Nectandra rigida, wood anatomy, wood properties 6428

Nectar
- chemistry, Bignoniaceae 8893
- consumption, mites, *Proctolaelaps kirmsei, Hamelia patens,* Costa Rica 10051
- *Eucalyptus,* ecology, *Drosophila flavohirta* 5164
- *Guettarda poasana,* flowers, antifungal properties 1250
- *Inga,* Costa Rica, chemistry 2983
- sugars, Malaysia 421

Nectar plants, beekeeping, forestry, South Africa 6150

Nectria cinnabarina, fungal diseases, broadleaves, USA, chemical control, testing 2293

Nectria coccinea
- fungal diseases
  - deciduous forests
    - Canada 1462
    - USA 1462
  - *Fagus,* North America, epidemiology 7401

Nectria fuckeliana, fungal diseases, *Picea abies,* fatty acids, sterols 2259

Nectria galligena
- fungal diseases
  - deciduous forests
    - Canada 1462
    - USA 1462
  - *Fagus,* North America, epidemiology 7401

Nectria rigidiuscula, fungal diseases, *Toona ciliata,* Argentina 8305

Needles (*see* Foliage)

Nematus calais
- insect pests
  - *Salix,* foliage, USA 4032
  - *Salix lasiandra,* USA, biology 2363

Nematus oligospilus, insect pests, *Salix,* Southern Africa, biology, damage 9175

Neobulgaria premnophila, fungal diseases, *Picea abies,* fatty acids, sterols 2259

Neodiprion gillettei, insect pests, *Pinus ponderosa,* defoliation, seedling growth 5766

Neodiprion sertifer
- insect pests
  - Germany, biological control 5803
  - *Pinus resinosa,* defoliation 7490
  - *Pinus sylvestris*
    - Austria, pheromone traps 5791
    - Czech Republic, pheromone traps 5763
    - Finland, foliage, monoterpenes 2367
    - Poland, chemical control 7499
    - resistance, provenance trials, Finland 10049
    - Russia, population dynamics, spatial distribution 10050
    - Sweden, control 7504

Neolitsea sericea, insect pests, *Lasioptera yadokariae,* Japan 7493

Neomicrocalamus mannii, bamboos, endangered species, India 733

Neomycta rubida, insect pests, *Metrosideros excelsa,* New Zealand, damage 4075

Neonauclea, wood chemistry, Indonesia 6448

Neonauclea celebica, Formicidae, mutualism, Indonesia 10027

Neonauclea cyrtopoda, Formicidae, mutualism, Indonesia 10027

Neoscortechinia kingii, wood anatomy 414

Neotropical Region, palaeobotany, mangroves 6533

Nepal
- agroforestry
  - development, indigenous knowledge 10104
  - fodder, trees, conferences 8490
  - reviews 9285
- bamboos 8969
- *Bauhinia variegata,* biomass production, equations 6965
- cloud forests, synecology, altitude, land use 1371
- community forestry
  - development, extension 7584
  - development projects, woman's status 3276
  - forest management, sustainability, protection of forests, forest products 6742
  - planning, participation 9289
- deforestation, environmental degradation, community forestry 8413
- endophytes, *Phoma, Taxus wallichiana,* medicinal plants 3144
- environmental management, sustainability, mountain areas, books 2453
- farm forestry, surveys, trees, products, utilization 1548
- *Ficus semicordata,* biomass production, equations 6965
- *Ficus subincisa,* fodder, production, management 6947
- forest management
  - community forestry 9291
    - development projects 8729
  - sustainability, community forestry 9290
- forest nurseries, pesticides, safety 6899
- fuel plantations, private forestry 6011
- insect pests, Curculionidae, *Dalbergia sissoo* 7462
- *Leucaena leucocephala,* biomass production, farm forestry, equations 6966
- medicinal plants 3471
- multipurpose trees
  - fodder
    - choice of species 6948
    - conferences 2461
  - forest nurseries, planting stock, production costs 9480
  - species trials, fuel plantations 6865
  - vegetative propagation, indigenous knowledge 6883
- mycorrhizas, *Amanita,* forest trees 7386
- national parks
  - management, nature conservation, biodiversity, buffer zones 8446
  - wildlife conservation, public opinion, rural communities 8442
- nature conservation
  - biodiversity 10127
  - development projects 9299
- *Shorea robusta,* coppice, management, yields 6908
- social forestry, development projects, erosion control, economics 728
- vegetation, synecology, maps 1371
- wildlife, *Rhinoceros unicornis,* browsing damage, riparian forests 692

Nephopterix syntaractis, insect pests, *Avicennia marina,* defoliation, Hong Kong 10038

Nerium oleander
- air pollution, heavy metals, indicator plants, Greece 7106
- bacterial diseases, *Pseudomonas syringae,* pathogenicity 8316
- tissue culture, somatic embryogenesis 116

Netherlands
- afforestation, reclamation, polders 1537
- bacterial diseases
  - *Erwinia amylovora, Crataegus,* flowering, control 612
  - *Xanthomonas*
    - *Populus,* clones, resistance 1465

Netherlands *cont.*

- bacterial diseases *cont.*
  - *Xanthomonas cont.*
    - *Salix dasyclados,* clones, resistance 1465
- birds, forest plantations, fragmentation, forest ecology 4067
- broadleaves
  - bark, chemistry, air pollution, trace elements 3749
  - stress factors, forest health 1296
- climatic change, phenology, frost resistance, simulation 2804
- conifers
  - air pollution
    - deposition, throughfall, precipitation 2866
    - plant nutrition, throughfall, nitrogen 5318
    - soil chemistry, soil biology, nitrogen 5318
  - forest borders, air pollution, deposition 6345
  - plant nutrition, nitrogen metabolism, air pollution 5290
- deciduous forests, silvicultural conversion, planning, remote sensing 150
- *Fagus sylvatica*
  - buds, dormancy, growth models 2510
  - soil fungi 3590
- fertilizers, sewage sludge, legislation 8593
- forest administration, nature conservation 10130
- forest economics, forest management, private forestry, methodology 265
- forest management
  - growing stock, simulation 4429
  - multiple use, simulation 4098
  - planning 807
- forest trees
  - acid deposition
    - seasonal variation, estimation 3655
    - simulation 1967
  - plant succession, dunes 9952
  - soil organic matter, dissolved organic matter 1907
  - wind damage 1062
- forestry, fertilizers, reviews 889
- *Fraxinus excelsior,* volume determination, remote sensing, radar 3518
- fungal diseases
  - *Armillaria,* distribution 5627
  - *Diplodia pinea,* conifers 1453
  - *Microsphaera alphitoides, Quercus robur,* acid deposition 3655
  - *Phaeocryptopus gaeumannii, Pseudotsuga menziesii,* spread 1464
- insects, forests, ecology 1519
- labour, forestry, Lyme disease 55
- mixed forests, plant succession, simulation 797
- mycorrhizas
  - *Fagus,* woodlands 9084
  - *Pinus sylvestris* 9074
  - *Quercus,* woodlands 9084
- *Pinus sylvestris*
  - air pollution, soil chemistry, nitrogen, sulfur 3665
  - dunes, plant succession, microclimate 1401
  - humus, soil chemistry, ground vegetation, plant succession 6280
  - plant succession, humus, development 5260
  - provenance trials 826
- *Populus*
  - plant competition, growth 6938
  - volume determination, remote sensing, radar 3518
- *Populus nigra,* bottomland forests, natural regeneration, seed germination 9963
- private forestry, forest economics, profitability 1051
- *Pseudotsuga menziesii*
  - air pollution
    - ammonia
      - deposition 2877
      - rhizosphere fungi 1972

Netherlands *cont.*

- *Pseudotsuga menziesii cont.*
  - cycling, fertilizers, irrigation 7963
  - forest influences, air, canopy 2904
  - nitrogen fertilizers, forest decline, mycorrhizas 4296
  - ozone, plant physiology 5312
  - plant water relations, soil water, simulation 3568
  - soil chemistry, metals, acid deposition 7892
  - soil organic matter, environment 1093
- *Quercus robur,* soil chemistry, plant nutrition, minerals 320
- *Quercus rubra,* fertilizers, nutrient deficiencies, air pollution, nitrogen, cycling 2617
- remote sensing, land use 5207-5208
- rodents, *Castor fiber,* plant succession, foraging 2386
- root nodules, *Frankia, Alnus glutinosa,* resistance 4852
- *Salix*
  - bottomland forests, natural regeneration, seed germination 9963
  - riverside plantations, erosion control 5842
- squirrels, *Sciurus vulgaris,* woodlands, fragmentation 6693
- wildlife, forests, ecology 1519

New Caledonia

- afforestation, mined land, reclamation 9252
- *Casuarina collina,* geographical distribution, site factors, plant nutrition 8887
- flora, vegetation types, surveys 8983
- *Gymnostoma,* geographical distribution, site factors, plant nutrition 8887
- parasitic plants, *Parasitaxus ustus, Falcatifolium taxoides,* host parasite relationships, morphology 9128
- *Pittosporum,* fruits, taxonomy, new species 9888
- rain forests, arthropods 7419
- *Santalum* 4168
- woody plants, afforestation, mined land, reclamation, species trials 9247

New Zealand

- *Aesculus hippocastanum,* foliage, pollution, heavy metals 3675
- *Agathis,* foliage, flavonoids, chemotaxonomy 8082
- *Alepis flavida,* mistletoes, *Nothofagus solandri* 4878
- bamboos, *Himalayacalamus hookerianus,* taxonomy, ornamental woody plants 8453
- birds
  - *Dacrydium cupressinum*
    - forest management
      - clear felling 1507
      - selective felling 1508
- broadleaves, frost resistance, plant succession 281
- coastal plant communities, dunes 1386
- conifers
  - forest management, multiple use, biodiversity 6744
  - forest plantations, forest economics, Korea Republic, foreign investment 8747
- *Cupressus,* tree breeding, wood properties, farm forestry 4830
- *Cupressus macrocarpa,* increment 4403
- *Dacrycarpus dacrydioides,* synecology, epiphytes, climbers 3088
- deciduous forests, landslides 4940
- deer
  - *Cervus,* broadleaves, browse 9226
  - *Cervus elaphus,* browsing, *Nothofagus solandri* 4051
- erosion control, broadleaves 4942
- *Eucalyptus delegatensis*
  - provenance trials
    - increment, diameter, stem form 4258
    - wood properties 4592
- *Eucalyptus regnans,* basal area, foliage, soil chemistry 4394
- farm forestry 9259

New Zealand *cont.*

- fens, synecology, foliage, morphology 3898
- fertilizers, sewage sludge, legislation 8593
- flora, seeds, adaptation, evolution 3826
- forest management 5991
- forest nurseries, weed control, herbicides, tolerance 8598
- forest plantations
  - biodiversity 6745
  - carbon cycle 4597
  - environmental impact 6367-6368
  - forest management
    - multiple use, attitudes 2539
    - sustainability 5990
  - hydrology 5833
  - soil fertility, soil classification 6366
  - valuation, national accounting 7705
  - weed control
    - biological control 1758
    - herbicides 1758
- forest trees
  - bottomland forests, floods, canopy gaps 3964
  - branches, foliage, habit 4620
  - climate, geographical distribution, synecology 7266
  - essential oils 1806
  - flora, domestication, history 2131
  - forest management, multiple use, attitudes 2539
  - forest plantations 5992
  - species trials, exotics, arboreta 2545
  - synecology, canopy gaps, natural regeneration 1413
- forestry 1635
  - hydrology, water quality 5834
  - nature conservation, forest administration 7588
  - women 4243
- fungal diseases
  - *Armillaria, Pinus radiata* 4017
  - *Armillaria novae-zelandiae, Pinus radiata* 4860
  - *Cyclaneusma, Pinus radiata,* genetic variation 4818, 4821
  - *Cyclaneusma minus, Pinus radiata* 4872
  - *Diplodia, Pinus radiata,* genetic variation 4818
  - *Diplodia taxi, Taxus baccata* 5650
  - *Dothiorella, Metrosideros excelsa* 4075
  - *Glomerella cingulata, Lupinus arboreus* 5649
  - *Mycosphaerella pini, Pinus radiata* 4872
  - *Seiridium, Cupressus lusitanica,* pruning 5638
- grasslands, *Nothofagus,* geographical distribution, palaeoecology 4765
- *Griselinia littoralis,* foliage, frost resistance, plant anatomy, damage 8761
- insect pests
  - forest trees, biological control, reviews 679
  - *Lymantria dispar,* introduced species 4884
  - *Neomycta rubida, Metrosideros excelsa,* damage 4075
  - *Platypus, Nothofagus solandri* 6297
- *Knightia excelsa,* wood anatomy 1213
- *Kunzea ericoides*
  - stand structure
    - population dynamics
      - dunes 4782
      - heathlands 4782
  - taxonomy 499
- *Kunzea sinclairii,* taxonomy 499
- *Kunzea sinclairii × Leptospermum scoparium,* taxonomy 499
- land use, planning, geographical information systems 8401
- *Leptospermum scoparium,* cold resistance, hardening, temperature, variation 8762
- mammals, *Trichosurus vulpecula, Metrosideros excelsa,* damage 4075
- mangroves, *Avicennia marina,* palaeoecology, pollen analysis 4759

New Zealand *cont.*
- marsupials
  - *Petrogale penicillata,* forests, control, water pollution 1506
  - *Trichosurus vulpecula*
    - forest trees, remote sensing, damage 471
    - forests, control, water pollution 1506
- *Melicytus flexuosus,* taxonomy, new species 3847
- mixed forests
  - seed dispersal, fruits 486
  - seed production, seed dispersal, seed predation 487
- mountain forests, plant succession 4786
- mycoplasmal diseases, *Cordyline australis* 4875
- *Nothofagus*
  - canopy, gas exchange, light, diurnal variation 4693
  - forest litter
    - decomposition 4499
    - measurement, seasonal variation 298
  - forest management, multiple use, nature conservation 6743
  - stand characteristics 3909
  - treelines, global warming 526
- *Nothofagus menziesii*
  - dispersal, genetic variation, gene flow 2212
  - foliage, frost resistance, plant anatomy, damage 8761
- *Nothofagus solandri*
  - seedlings, drought injury, site preparation 6297
  - stand development, wind 4797
- *Nothofagus truncata*
  - genetic variation, isoenzymes 584
  - selection system 6092
- *Peraxilla tetrapetala,* mistletoes, *Nothofagus solandri* 4878
- *Phyllocladus,* genetic variation, isoenzymes, frost resistance 562
- *Pinus radiata*
  - agroforestry
    - plant competition, foliar diagnosis, statistical analysis 4957
    - soil chemistry 4958
  - aspect, plant physiology, measurement, carbon isotopes 4694
  - evaporation, seasonal variation 1124
  - foliage
    - age, branches, biomass 3734
    - phenology 2010
    - waxes, indicator plants, air pollution 3754
  - forest influences, hydrology, watersheds 2910
  - forest plantations
    - erosion, hurricanes, remote sensing 5200
    - forest influences, soil properties 1185
    - landslides 4940
    - streams, water temperature 8376
    - watersheds, hydrology 8375-8376
  - genetic variation
    - bark, monoterpenoids 4824, 4826
    - heritability, clones 4820
    - increment, stem form, fungal diseases 4818, 4821
    - provenance trials 4817
    - seedling growth, stem form 4819
    - wood chemistry, oleoresins 4823
    - wood density, spiral grain 4822
  - growth models, forest management, development 4225
  - habit, internodes, site factors, simulation 3710
  - irrigation, sewage effluent, soil fauna 7938
  - nitrogen fertilizers
    - agroforestry
      - plant competition 1568-1569
      - plant nutrition 1568-1569
  - nutrient deficiencies
    - genetic variation 5293
    - magnesium, potassium 4542

New Zealand *cont.*
- *Pinus radiata cont.*
  - plant nutrition, whole tree logging, productivity 1135
  - seedling growth, weeds, plant competition 4342
  - site class assessment, geographical information systems, statistical analysis 4402
  - soil properties, forest influences 8021
  - thinning, experimental design, statistical analysis 5015
  - tree breeding, genetic variation 4825
  - wood anatomy, tracheids, cell walls, genetic variation 3735
- *Pittosporum eugenioides,* foliage, frost resistance, plant anatomy, damage 8761
- Podocarpaceae, rain forests, light, synecology 271
- *Podocarpus totara*
  - provenance trials, seedling growth, stem form 69
  - silviculture 3426
- *Prumnopitys ferruginea,* treelines, global warming 526
- *Pseudotsuga menziesii,* silviculture 2659
- rain forests
  - layer structure 6560
  - natural regeneration, canopy gaps, population dynamics 1393
  - synecology, botanical composition, stand structure 3076
- remote sensing
  - satellites, land use, classification, databases 8400
  - video imagery 7837
- *Retrophyllum,* foliage, morphology, palaeobotany, taxonomy 497
- rodents, *Rattus norvegicus,* damage, *Nothofagus,* natural regeneration 4756
- root nodules, *Frankia, Casuarina,* silt loam soils 3160
- safety, attitudes, surveys 7709
- *Salix,* root pruning, shelterbelts, crops, plant competition 2411
- secondary forests, natural regeneration, nature conservation 3869
- *Sequoia sempervirens,* flooding, sediment yield, tolerance 4525
- soil formation, soil chemistry, logging, *Pinus radiata* 1097
- *Toronia toru,* wood anatomy 1213
- *Ulex europaeus,* woody weeds, biological control 8636
- vegetation, history, pollen analysis, climate 3886
- weeds, forest trees, biological control, reviews 679
- wildlife, birds, conifers 6670
- woody plants, branches, foliage, habit 4620
- woody weeds
  - biological control, mycoherbicides 8637
  - *Buddleja davidii,* biological control 5142
  - *Cytisus scoparius,* biological control 8647
  - forest trees, biological control 5136

Nicaragua
- agroforestry, development projects, databases 10109
- broadleaves, natural regeneration, hurricanes 3438
- *Galipea dasysperma,* taxonomy 3850
- genetic resources, tree breeding, conservation 3969
- multipurpose trees, direct sowing, establishment, contour cultivation, erosion control 4945
- rain forests
  - forest resources, utilization, education 1644
  - natural regeneration, hurricanes 547

Niger
- afforestation
  - agroforestry, development projects 1546
  - reclamation, techniques 5852

Niger *cont.*
- *Azadirachta indica,* shelterbelts, crops, microclimate 7384, 8383
- *Combretum,* agroforestry, cattle, grazing, management 4960
- *Faidherbia albida*
  - forest influences, soil fertility 1919
  - increment, variation, soil fertility, agroforestry 3275
- forest management, sustainability, land use, reviews 7830
- forestry development, forest management, agroforestry 811
- fuelwood, resources, management, development projects 8554
- *Guiera senegalensis*
  - agroforestry, cattle, grazing, management 4960
  - savannas, light, simulation 3546
- multipurpose trees, forest nurseries, irrigation, waste water 9473

Nigeria
- *Acacia auriculiformis,* seedling growth, water stress 1946
- *Acioa barteri*
  - fallow, forest litter, cycling, nutrients 2818
  - pruning trash, decomposition, soil fauna 5262
- agroforestry, surveys 4112
- Arecaceae, forest resources, resource utilization, forest ownership, forest management 7700
- broadleaves, forest influences, soil properties, land use 8024
- *Cassia*
  - phosphorus fertilizers, plant nutrition, nitrogen 9724
  - pruning, plant nutrition 5153
- *Dacryodes edulis,* seeds, nutritive value 436
- *Faidherbia albida,* seedling growth, water stress 1946
- *Gliricidia sepium*
  - agroforestry, fodder, production 8421
  - cutting programmes, fodder, production 2672
  - establishment, agroforestry systems 6730
  - phosphorus fertilizers, plant nutrition, nitrogen 9724
  - pruning, plant nutrition 5153
  - pruning trash, decomposition, soil fauna 5262
- *Gmelina arborea,* forest plantations, volume determination, merchantable volume, equations 7669
- *Leucaena leucocephala*
  - agroforestry, fodder, production 8421
  - cutting programmes, fodder, production 2672
  - pruning trash, decomposition, soil fauna 5262
- mangrove forests, forest influences, soil properties, variation 8022
- mangroves
  - Rhizophoraceae, epidermis, morphology, taxonomy 3724
  - stand structure, soil properties 7293
- medicinal plants 201
- multipurpose trees
  - agroforestry, pruning trash, decomposition, precipitation 8434
  - browse plants, insect pests 8325
  - species trials, agroforestry, soil properties, soil types 6868
- national parks, management, biodiversity 9305
- nitrogen fixing trees, species trials 1665
- *Parkia biglobosa,* canopy, soil fertility, mycorrhizas 10101
- *Pinus caribaea,* biomass production, nutrient uptake, savannas 2704
- plant parasitic nematodes, *Pinus caribaea* 9179
- pollen, morphology 7216
- rain forests
  - broadleaves, soil properties 7878
  - forest litter, chemistry, decomposition 3578

Nigeria *cont.*
- *Triplochiton scleroxylon,* breeding programmes, shoot cuttings, techniques 4284
- tropical forests, nature reserves, conservation, agricultural development 7602
- vegetation types, soil fauna, Isoptera 8801

Nigrospora sphaerica, fungal diseases, *Artocarpus heterophyllus,* Bangladesh, foliage 6636

Nitrogen, metabolism, *Picea abies,* seedlings, air pollution, sulfur dioxide 7995

Nitrogen cycle
- *Acacia,* shifting cultivation, Sahel, simulation 8429
- *Acacia senegal,* agroforestry, Arid Regions, simulation 4118
- air pollution, soil chemistry, Europe, nitrogen, saturation 5322-5323
- *Alnus glutinosa,* rhizosphere, soil bacteria, seasonal variation, Spain 1923
- *Alnus nepalensis,* forest plantations, India 4531
- *Betula pendula,* air pollution, ozone, Finland 7096
- biomass production, climatic change, simulation 1834
- boreal forests, plant succession, USA 6318
- *Castanea sativa,* carbon dioxide enrichment 4464
- *Casuarina equisetifolia,* forest plantations, India 4531
- coastal plant communities, air pollution, nitrogen, USA 5304
- coniferous forests, carbon cycle, Europe, simulation 9364
- conifers
  - denitrification, Europe, measurement 3575
  - fertilizers, water stress, methodology 7646
  - water pollution, simulation, USA 3625
- deciduous forests
  - air pollution, nitrogen retention, USA 326
  - USA 9731
- deforestation, greenhouse effect, Costa Rica, estimation 2409
- *Eucalyptus exserta,* carbon cycle, China, simulation 4211
- *Fagus sylvatica,* soil biology, microorganisms, carbon cycle, Germany 7933
- forests
  - soil
    - air pollution, reviews 1953
    - global warming, reviews 1953
  - watersheds 1951
  - wetlands, USA 1949
- global warming, carbon dioxide enrichment, ecosystems, change 4467
- isotope fractionation, *Pinus sylvestris,* fertilizers, Sweden, methodology 2490
- land use, Brazil 8826
- *Larix gmelinii,* forest plantations, China 7964
- *Leucaena leucocephala*
  - forest plantations, India 4531
  - nitrogen fixation, USA 1138
- nitrogen fixing trees, USA, measurement, nitrification 3621
- *Picea abies*
  - fertilizers, Finland 7953
  - forest decline, air pollution, Germany 3823
  - roots, decomposition, Estonia 7893
  - soil chemistry, ground vegetation, Sweden, methodology 1145
- *Pinus contorta,* plant nutrition, fertilizers, Canada 325
- *Pinus ponderosa,* forest fires, USA, monoterpenes 3636
- *Pinus resinosa,* air pollution, nitrogen retention, USA 326
- *Pinus sylvestris*
  - carbon dioxide enrichment, ammonia 1966

Nitrogen cycle *cont.*
- *Pinus sylvestris cont.*
  - nitrogen fertilizers, Sweden 4295
- *Pinus thunbergii,* fertilizers, sewage, runoff, Japan 3413
- *Populus eugenei,* roots, carbon dioxide enrichment 7191
- *Populus interamericana,* agroforestry, soil properties, Sweden 10115
- riparian forests, water pollution, nitrates, USA 2890
- root nodules, *Casuarina equisetifolia,* India 5568
- soil chemistry, USA 7887
- topography, deciduous forests, USA 2847

Nitrogen fixation (*see also* Nitrogen fixing trees)
- *Acacia mangium*
  - *Bradyrhizobium,* plant physiology 598
  - seedling growth, plant nutrition, phosphorus, provenance 6313
- *Acacia nilotica,* genetic variation 5561
- *Alnus glutinosa,* carbon dioxide enrichment 4527
- *Alnus incana*
  - climatic factors, diurnal variation 3015
  - root nodules, lipids, gas exchange 5587
- *Alnus rubra,* seedling growth, photosynthesis, temperature, plant water relations 1294
- broadleaves, measurement 1289
- *Cassia spectabilis,* agroforestry, Philippines 4115
- *Casuarina cunninghamiana,* stems, nodulation, Réunion 2238
- *Casuarina equisetifolia*
  - plant nutrition, plant competition 6307
  - soil water, India 3154
- *Erythrina,* agroforestry, botany, research, conferences 3309
- *Erythrina poeppigiana,* pruning, nutrition physiology, Costa Rica 9733
- estimation
  - isotope dilution
    - *Acacia,* pot experimentation 9725
    - *Faidherbia albida,* pot experimentation 9725
- Fabaceae
  - conferences 8487
  - root nodules, Tropics, reviews 6320
- *Gliricidia sepium,* agroforestry, Philippines 4115
- *Ilex chinensis,* forest litter, Japan 1943
- *Leucaena leucocephala*
  - nitrogen cycle, USA 1138
  - Puerto Rico, estimation, techniques 8500
- mangroves, epiphytes, Cyanobacteria, Guadeloupe 537
- *Metrosideros polymorpha,* plant succession, volcanic soils, USA 2827
- multipurpose trees, seedlings, measurement 8265
- mycorrhizas
  - broadleaves
    - forest nurseries, Ethiopia 1446
    - vegetation types 6618
- nodulation, *Gliricidia sepium,* provenance, Sri Lanka 3994
- *Prosopis juliflora,* root nodules, seedlings, measurement, isotope dilution 10002
- *Quercus ithaburensis, Azospirillum brasilense,* Israel, seedling growth 7407
- *Robinia pseudoacacia,* measurement, isotope dilution 6321
- root nodules
  - *Bradyrhizobium, Acacia ampliceps,* salt tolerance, seedling growth 6620
  - *Frankia*
    - *Alnus glutinosa* 8264
    - *Casuarina cunninghamiana* 2230
  - *Rhizobium, Acacia ampliceps,* salt tolerance, seedling growth 6620

Nitrogen fixation *cont.*
- symbiosis
  - *Bradyrhizobium japonicum,* multipurpose trees, seedling growth 3151
  - *Frankia, Casuarina,* trials 2232
  - *Rhizobium*
    - *Leucaena diversifolia,* seedlings, isotope dilution 8263
    - multipurpose trees, seedling growth 3151
    - *Sesbania sesban,* seedlings, isotope dilution 8263

Nitrogen fixing bacteria, *Frankia, Alnus cordata,* interactions, mycorrhizas, *Glomus* 9079

Nitrogen fixing trees (*see also* Nitrogen fixation)
- agroforestry, choice of species 2415
- *Alnus glutinosa,* pruning, plant physiology, plant composition, growth 8096
- books 3302
- phylogeny 2173
- pruning trash
  - chemistry
    - decomposition
      - agroforestry
        - Indonesia 1939
        - laboratory tests 1939
- seedlings, root nodules, *Rhizobium,* arid soils, India 2234
- short rotation forestry, biomass production, India 1736
- species trials
  - Nigeria 1665
  - reclamation, fly ash, India 9248

Nodulation
- *Casuarina cunninghamiana,* stems, nitrogen fixation, Réunion 2238
- *Rhizobium, Leucaena leucocephala,* biomass production, plant nutrition 7391

Noise, safety, protective clothing, Canada 1648

Noise abatement, street trees, microclimate, China 10156

Nomenclature
- bamboos, *Bambusa arundinacea,* taxonomy, India 3854
- *Eucalyptus,* taxonomy, Australia 5434
- forest trees 4743
- *Larix,* Russia 8979
- *Maesobotrya,* taxonomy, Zaire 5426
- *Naucleopsis,* taxonomy, Brazil 9895
- *Pyrus,* taxonomy, geographical distribution, bibliographies 7221
- terminology, forests, woodlands, Africa 3907
- *Vitellaria paradoxa* 9897
- *Xanthorrhoea resinifera,* Australia 3853

Non-governmental organizations
- community forestry, development projects, Asia, conferences 774
- deforestation, environmental protection, Indonesia 6862
- forestry 2538
- rain forests, forest policy 5970

Non-wood forest products (*see also* Minor forest products)
- bottomland forests, forest management, Brazil 5188
- collection
  - Mali 6142
  - rural economy, India 6156
- cottage industry, rural development, India 6141
- deforestation, forest resources, Zimbabwe 8417
- food supply, villages, Tanzania 1796
- forest economics, valuation, Canada, reviews 4456
- forest management, multiple use, USA 5985
- forest trees, forest economics, Peninsular Malaysia 963
- rain forests, valuation, Ecuador 2782
- valuation, amenity value of forests, Sweden 9650

Noorda esmeralda, insect pests, Argentina 2301

- ***Normanbya normanbyi,*** seed predation, Australia 6513
- **North America**
  - *Acer saccharum,* grain and figure, geographical distribution 8861
  - agroforestry 5881
  - birds, *Brachyramphus marmoratus,* ecology, conservation 10066
  - broadleaves
    - cleaning 162
    - plant competition, growth 3058
    - thinning 162
  - clear felling, environmental impact, books 5923
  - conifers, dendrochronology 3292
  - deciduous forests, biomass, carbon cycle 3481
  - flora
    - books 5928
    - taxonomy 5929
  - forest decline, air pollution 5417
  - forest fires, history, sediment, analysis 3701
  - forest trees
    - altitude, water use efficiency 4513
    - guide books 7622
  - forests, climatic change, simulation, growth 3551
  - fungal diseases
    - *Cryphonectria parasitica, Castanea dentata* 9108
    - *Nectria, Fagus,* epidemiology 7401
  - insect pests
    - *Cryptococcus fagisuga, Fagus,* fungal diseases, *Nectria* 7401
    - *Dendroctonus punctatus, Picea,* biology 8343
    - forest trees 2305
    - *Pissodes strobi*
      - *Picea*
        - biological control 680
        - parasitoids 680
      - *Pinus*
        - biological control 680
        - parasitoids 680
  - mangrove forests, vegetation types 6548
  - *Picea mariana*
    - plant nutrition, reviews 4615
    - plant physiology, reviews 4615
  - *Picea rubens,* genetics 6586
  - *Pinus ponderosa,* genetic variation, gas exchange, photosynthesis, transpiration 8198
  - *Pinus resinosa*
    - autecology, forest fires 506
    - geographical distribution, climate, simulation 2135
  - *Pinus strobus,* palaeoecology 8151
  - protection of forests, forest management, forest economics, models 6248
  - *Pseudotsuga menziesii,* genetic variation, gas exchange, photosynthesis, transpiration 8198
  - *Quercus,* genetics, breeding programmes, conferences 3306
  - *Salix,* taxonomy 8136
  - synecology, ecotones, simulation 3061
  - *Ulmus,* cultivars, checklists 8137
  - vegetation types
    - plant nutrition, nitrogen, climate 1130
    - synecology, classification 3082
  - virgin forests, conferences 1605
  - wildlife, small mammals, clear felling, ecology 3193
  - wood anatomy, dicotyledons, climate 268
  - woody plants, species diversity, vegetation types 2149
- **Northern Ireland,** *Picea sitchensis,* silviculture, wood properties 7117
- **Norway**
  - acid deposition
    - research 754
    - soil chemistry, simulation 8510
  - atmosphere, forest influences, silviculture, carbon cycle, simulation 2901
  - *Betula,* deciduous forests, pollen analysis, atmosphere 475
  - *Betula pubescens,* plant succession, moraine soils 1404
  - birds, *Tetrao urogallus, Pinus sylvestris,* foliage, browse 4056
- **Norway** *cont.*
  - boreal forests 3925
    - carbon dioxide enrichment 5229
  - broadleaves, air pollution, runoff, soil chemistry, nitric acid 5320
  - clear felling, forest influences, pollution, heavy metals 8019
  - coniferous forests
    - forest decline
      - air pollution, assessment 7207
      - regions, variation 9859
    - forest health, regions, variation 9859
    - fungi, relationships, layer structure 9990
    - synecology, layer structure, statistical analysis 3941
  - conifers
    - foliage, damage, air pollution, fluorides 5331
    - remote sensing, diameter 9629
  - deer, *Capreolus capreolus,* salvage felling and logging 6694
  - fertilizers, sewage sludge, legislation 8593
  - forest decline, air pollution, international cooperation 6859
  - forest economics, nature conservation, valuation, simulation models 5218
  - forest management, coniferous forests, nature conservation, public opinion 9406
  - forest soils, soil acidity, humus 9692
  - forest trees, air pollution, fluorides, foliage, damage 5330
  - fungal diseases
    - *Graphium, Picea abies,* insect pests, disease vectors 10014
    - *Ophiostoma, Picea abies,* insect pests, disease vectors 10014
    - *Ophiostoma novo-ulmi, Ulmus glabra,* vectors 2346
    - *Ophiostoma polonicum*
      - *Picea abies*
        - disease vectors, *Ips typographus* 10015
        - pruning
          - plant physiology 10015
          - resistance 10015
    - *Rhizoctonia,* conifers, forest nurseries 5620
  - geographical information systems, mapping, stand characteristics, composition, site factors 5021
  - insect pests
    - Coleoptera, *Pinus sylvestris,* distribution 2350
    - *Ips typographus*
      - *Picea abies*
        - disease vectors 10014
          - *Ophiostoma polonicum* 10015
    - *Picea abies,* cones 7431
    - *Scolytus laevis, Ulmus glabra,* disease vectors 2346
  - land use, multiple use, conferences 6804
  - mycorrhizas, *Salix* 8261
  - *Picea,* silvicultural systems, insects, species diversity, conservation 7418
  - *Picea abies*
    - forest influences, forest economics, peatlands, carbon cycle 2784
    - old fields, stand development, soil chemistry 7890
    - progeny testing, frost resistance 8210
    - provenance trials, increment, frost injury 9413
    - seed orchards, reproductive behaviour, climatic factors, cold resistance 9878
    - selection system, increment, stand development 9489
    - tree breeding, progeny testing, frost resistance, phenology 568
    - volume tables 5170
  - *Pinus sylvestris*
    - forest influences, forest economics, peatlands, carbon cycle 2784
    - lichens, indicator plants, air pollution, distribution 1390
    - understorey, fertilizers, roots 7751
- **Norway** *cont.*
  - *Populus tremula,* photosynthesis, lichens, adverse effects 8932
  - *Salix,* geographical distribution 2136
  - urban forestry, amenity forests, forest ownership, public opinion 10134
  - wildlife, broadleaves, weed control, woody weeds 10070
- ***Nothofagus***
  - forest fires, forest ecology, simulation 2920
  - forest management, multiple use, nature conservation, New Zealand 6743
  - geographical distribution, genetic variation, adaptation, hybrids, Chile 6386
  - grasslands, geographical distribution, palaeoecology, New Zealand 4765
  - mixed forests, seed dispersal, fruits, New Zealand 486
  - mycorrhizas, *Rozites,* forests, Australia 5592
  - synecology, Argentina 1552
- ***Nothofagus alessandri,*** seed germination, vegetative propagation, Chile 6086
- ***Nothofagus antarctica***
  - forest fires, forest ecology, South America 2916
  - seed germination, vegetative propagation, Chile 6086
- ***Nothofagus betuloides,*** seed germination, vegetative propagation, Chile 6086
- ***Nothofagus cunninghamii***
  - foliage, length, palaeoecology, Australia 3065
  - rain forests, Australia, Bryophyta, lichens 9945
- ***Nothofagus dombeyi***
  - assortments, Chile, secondary forests 992
  - forest plantations, natural regeneration, increment, Chile 6184
  - insect pests, *Basileura osornoensis,* Chile, new species 2329
  - seed germination, vegetative propagation, Chile 6086
  - shoot cuttings, Chile 6062
- ***Nothofagus fusca***
  - canopy, gas exchange, light, New Zealand, diurnal variation 4693
  - forest litter
    - decomposition, New Zealand 4499
    - measurement, seasonal variation, New Zealand 298
  - stand characteristics, New Zealand 3909
  - treelines, global warming, New Zealand 526
- ***Nothofagus glauca,*** seed germination, vegetative propagation, Chile 6086
- ***Nothofagus leoni,*** seed germination, vegetative propagation, Chile 6086
- ***Nothofagus menziesii***
  - canopy, gas exchange, light, New Zealand, diurnal variation 4693
  - dispersal, genetic variation, gene flow, New Zealand 2212
  - foliage
    - frost resistance, plant anatomy, New Zealand, damage 8761
    - length, palaeoecology, Australia 3065
  - forest litter
    - decomposition, New Zealand 4499
    - measurement, seasonal variation, New Zealand 298
  - rodents, *Rattus norvegicus,* damage, natural regeneration, New Zealand 4756
  - treelines, global warming, New Zealand 526
- ***Nothofagus moorei,*** foliage, length, palaeoecology, Australia 3065
- ***Nothofagus nitida***
  - rain forests, seed size, recruitment, Chile 7258
  - seed germination, vegetative propagation, Chile 6086
- ***Nothofagus obliqua***
  - assortments, Chile, secondary forests 992
  - forest plantations, natural regeneration, increment, Chile 6184
  - increment boring, techniques, Chile, secondary forests 6168

- ***Nothofagus obliqua*** *cont.*
  - seed germination, vegetative propagation, Chile 6086
  - shoot cuttings, Chile 6062
  - stem form, taper, equations, Chile, secondary forests 6169
- ***Nothofagus plicata***, palaeobotany, Australia 8144
- ***Nothofagus procera***
  - assortments, Chile, secondary forests 992
  - forest plantations, natural regeneration, increment, Chile 6184
  - increment boring, techniques, Chile, secondary forests 6168
  - seed germination, vegetative propagation, Chile 6086
  - shoot cuttings, Chile 6062
  - stem form, taper, equations, Chile, secondary forests 6169
  - volume tables, Chile, secondary forests 992
- ***Nothofagus pullei***, mountain forests, disturbed land, plant succession, synecology, Papua New Guinea 3104
- ***Nothofagus pumilio***
  - forest litter, Chile 1101
  - fungal diseases, Argentina, damage 8288
  - natural regeneration
    - group fellings, Argentina 1742
    - measurement, data analysis, Argentina 5943
  - plant morphology, Argentina, equations 6170
  - seed germination, vegetative propagation, Chile 6086
  - silviculture, mensuration, synecology, Chile, reviews 955
  - volume determination, merchantable volume, estimation, Argentina 5171
- ***Nothofagus solandri***
  - *Alepis flavida*, mistletoes, New Zealand 4878
  - frost resistance, plant succession, New Zealand 281
  - insect pests, *Platypus*, New Zealand 6297
  - *Peraxilla tetrapetala*, mistletoes, New Zealand 4878
  - photosynthesis, reviews, photoinhibition 5415
  - seedlings, drought injury, site preparation, New Zealand 6297
  - stand characteristics, deer, *Cervus elaphus*, browsing, New Zealand 4051
  - stand development, wind, New Zealand 4797
  - treelines, global warming, New Zealand 526
- ***Nothofagus solandri* var. *cliffortioides***
  - rodents, *Rattus norvegicus*, damage, natural regeneration, New Zealand 4756
  - stand characteristics, New Zealand 3909
- ***Nothofagus truncata***
  - genetic variation, isoenzymes, New Zealand 584
  - selection system, New Zealand 6092
  - stand characteristics, New Zealand 3909
- ***Nucifraga caryocatactes***, birds, conifers, seed dispersal, Germany 1307
- ***Nucifraga columbiana***, birds, *Pinus flexilis*, seed dispersal, population genetics, USA 3708
- **Nuclear fall-out** (*see* Air pollution, fallout; Radionuclides, fallout)
- **Nurse trees**
  - conifers, UK, *Quercus robur* 5155
  - *Lupinus arboreus*, biomass production, agroforestry, defoliation, UK 3478
- **Nurseries** (*see* Forest nurseries)
- **Nutrient allocation**, *Acacia*, nitrogen fertilizers, Côte d'Ivoire 3408
- **Nutrient cycles** (*see* Carbon cycle; Cycling; Nitrogen cycle)
- **Nutrient deficiencies**
  - *Acer saccharum*, soil chemistry, cation exchange, Canada 7972
  - boron
    - copper, *Pinus caribaea*, seedling growth, plant composition 316
    - *Eucalyptus*, China 6323
- **Nutrient deficiencies** *cont.*
  - *Casuarina equisetifolia*, fertilizers, requirements 3628
  - conifers
    - air pollution, ozone, nutrition physiology 5326
    - Germany 6314
    - ozone, simulation, interactions 1976
  - copper
    - *Eucalyptus maculata*, assessment 5297
    - *Eucalyptus nitens*, fertilizers, Australia 1717
  - deciduous forests, soil chemistry, USA, methodology 4191
  - *Eucalyptus*, books 6780
  - *Eucalyptus maculata*, seedlings, symptoms 1146
  - iron, *Acer pseudoplatanus*, cell culture, respiration 461
  - magnesium
    - *Abies grandis*, fertilizers, sewage sludge, USA 3406
    - forest trees, reviews 9732
    - *Picea abies*
      - amelioration of forest sites, Austria 7754
      - fertilizers, lime, acid soils, France 2856
      - foliage, pigments 4536
      - genetics, isoenzymes, Germany 1424
      - photosynthesis 8097
      - soil chemistry, Germany 7057
    - potassium, *Pinus radiata*, New Zealand 4542
    - *Pseudotsuga menziesii*, fertilizers, sewage sludge, USA 3406
  - mycorrhizas, *Eucalyptus globulus*, seedling growth 5609
  - nitrogen
    - *Picea abies*, Germany 1126
    - *Pinus banksiana*, seedlings, plant water relations, osmotic pressure 7941
    - *Pinus ponderosa*, seedling growth, carbon dioxide enrichment 7967
    - *Pinus sylvestris*, foliage, chemistry, ultrastructure 8822
    - *Populus tremuloides*, air pollution, ozone, photosynthesis 3023
  - phosphorus
    - *Betula pendula*, toxicity, aluminium 7919
    - *Metrosideros polymorpha*, fertilizers, USA 9461
    - *Picea glauca*, forest nurseries, nitrogen fertilizers 5111
    - *Pinus sylvestris*, foliage, chemistry, ultrastructure 6322
  - *Picea abies*
    - air pollution
      - plant nutrition 5327
      - soil chemistry, Germany 9755
    - defoliation, soil chemistry, Germany, phosphorus 1126
    - magnesium fertilizers
      - foliage, Germany 132
      - soil chemistry, Germany 132
    - plant physiology, air pollution 5299
    - soil chemistry, USA 2848
  - *Picea pungens*, forest nurseries, Germany, potassium 1147
  - *Picea rubens*, USA 3639
  - *Pinus patula*, afforestation, agricultural land, allelopathy, South Africa 154
  - *Pinus radiata*
    - artificial regeneration, site preparation, soil chemistry, South Africa 180
    - genetic variation, New Zealand 5293
    - NPK fertilizers, soil types, South Africa 7073
    - remote sensing, colour photography 7664
  - potassium, *Acer saccharum*, fertilizers, Canada 2615
  - *Pseudotsuga menziesii*, volcanic soils, USA 7053
  - *Quercus rubra*, fertilizers, air pollution, nitrogen, cycling, Netherlands 2617
- **Nutrient deficiencies** *cont.*
  - symptoms, canes and rattans, *Calamus manan*, seedlings 1128
- **Nutrient uptake**
  - *Betula pendula*, heavy metals 7056
  - cycling, plant nutrition, conferences 6802
  - *Picea abies*, ozone, enzyme activity 4708
  - *Pseudotsuga menziesii*, acid deposition 3631
- **Nutrients**
  - cycling, cerrado, forest fires, biomass, Brazil 527
  - *Dacryodes excelsa*, rain forests, Puerto Rico, measurement 7080
  - distribution, conifers, forest influences, Sweden 7129
- **Nutrition** (*see* Plant nutrition)
- **Nutrition physiology**
  - conifers, air pollution, ozone, nutrient deficiencies 5326
  - mycorrhizas
    - *Paxillus involutus*, forest trees, soil pH 5583
    - *Pisolithus tinctorius*, *Pinus taeda* 5585
- ***Nyctanthes arbor-tristis***
  - fungal diseases, Pakistan, seeds 2257
  - medicinal plants, ethnobotany, India 8687
- ***Nypa fruticans***
  - adaptation, foliage, anatomy, chlorophyll, India 9790
  - afforestation, erosion control, India 3225
  - mangroves
    - afforestation, site requirements, tides, Bangladesh 7776
    - stand structure, soil properties, Nigeria 7293
- ***Nyssa aquatica***, secondary forests, stand characteristics, USA, growth 7321
- ***Nyssa ogeche***, shade trees, USA, evaluation 8457
- ***Nyssa sylvatica***
  - control, woody weeds, herbicides, USA 1767
  - dendrochronology, synecology, increment, USA 5914
  - foliage, stand characteristics, browse, nutritive value 3196
  - seedlings, plant competition, North America, growth 3058
- **Oceania**
  - America, agroforestry, livestock farming, conferences 4181
  - degraded forests, tropical forests, reclamation, conferences 2479, 3232, 3245
  - forestry 9388
    - research, management, conferences 2481
  - Tropics, agroforestry, livestock farming, conferences 4181
- ***Ochroma lagopus*** (*see Ochroma pyramidale*)
- ***Ochroma pyramidale***
  - seedlings, morphology, identification, secondary forests, Peru 6431
  - wood anatomy 4630
  - wood chemistry, esters 1253
- ***Ochropleura fennica***, insect pests, biological control, parasitoids 9193
- ***Ocnerostoma piniariellum***, insect pests, *Pinus*, Spain, biology, damage 8332
- ***Ocotea bullata***
  - bark, neolignans 8084
  - broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223
- ***Ocotea corymbosa***, fruits, chemistry, terpenoids 9839
- ***Ocotea foetens***
  - silvicultural characters, Canary Islands 8888
  - species trials, rehabilitation, Canary Islands 6032
- ***Ocotea spathulata***, cloud forests, precipitation, deposition, Puerto Rico 2789
- ***Ocotea tonduzii***, epiphytes, cloud forests, Costa Rica 1389
- ***Ocotea vellosiana***, fruits, chemistry, alkaloids, flavonols 9836

- ***Ocotea whitei,*** fungal diseases, cankers, Panama 2272
- ***Odocoileus hemionus***
  - deer
    - browse, Canada 1505
    - clear felling, USA, habitats 8366
    - forest management
      - hunting, USA 10065
      - logging, Canada 239
    - *Quercus rubra,* plant succession, USA 3093
    - USA, repellents 3199
- ***Odocoileus virginianus***
  - deer
    - *Abies balsamea,* USA, browsing damage 3203
    - browse
      - management, USA 3201
      - plant succession, USA 5827
      - USA 10059
    - forest trees, browse, USA 3196
    - *Pinus strobus,* Christmas trees, USA 4370
    - riparian forests, Canada, habitats 4903
    - USA
      - ecology, management 3213
      - resting places 3202
- ***Odontotermes bhagwatii,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Odontotermes distans,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Odontotermes feae,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Odontotermes guptai,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Odontotermes obesus,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Odontotermes redemanni,*** insect pests, *Eucalyptus tereticornis,* India 2309
- ***Oecophylla***
  - insect pests
    - rain forests, Australia, ecology 662
    - sclerophyllous forests, Australia, ecology 662
- ***Oedura reticulata,*** reptiles, *Eucalyptus,* Australia, fragmentation 7531
- ***Oiketicus,*** insect pests, Argentina 2301
- ***Oiketicus platensis,*** insect pests, Argentina 2301
- **Oil spills**
  - damage, *Picea mariana,* permafrost, USA 5342
  - mangroves
    - *Rhizophora mangle*
      - Panama
        - damage, ecology 4575, 4577, 6357
        - persistence 4576
  - *Picea mariana,* boreal forests, USA, recovery 1980
- **Old and fossil wood**
  - dendrochronology, Canada 8464
  - Fabaceae, wood anatomy, Mexico 2022
  - insect pests, *Xylocopa, Taxodioxylon gypsaceum,* Italy, damage 1492
- **Old fields,** woody plants, plant succession, site requirements 3102
- ***Olea capensis,*** broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223
- ***Olea europaea***
  - air pollution, heavy metals, indicator plants, Greece 7106
  - foliage, trichomes, ultraviolet radiation, damage 7161
  - molecular genetics, cytology 585
  - water stress, stomata, responses 5278
- **Oleoresins** (*see* Resins)
  - *Pinus contorta,* injuries, growth effects, USA 7206
- **Oligochaeta**
  - *Picea abies,* fertilizers, lime, acid deposition, humus 1105
  - soil biology, USA 7929
  - soil fauna, *Populus tremuloides,* Canada, growth 4502
- ***Olneya tesota,*** seed production, USA 7214
- **Oman**
  - flora 7252
  - genetic resources 7339
- **Oman** *cont.*
  - medicinal plants, books 3295
- ***Oncideres,*** insect pests, Argentina 2301
- ***Oncorhynchus clarki,*** fishes, grazing, livestock farming, freshwater ecology, USA 8357
- **Ontogeny,** *Pseudotsuga menziesii,* maturation, plant morphology, measurement 4652
- ***Operophtera brumata***
  - insect pests
    - Czechoslovakia, heavy metals, parasitoids 2331
    - *Quercus,* Belgium, ecology 5717
    - *Quercus robur*
      - France, biology, population dynamics 2316
      - Russia
        - damage 10039
        - foliage, regeneration 10040
- ***Ophiostoma***
  - fungal diseases
    - taxonomy 2264
    - *Ulmus,* Europe, spread 8299
    - *Ulmus wallichiana,* India 5634
- ***Ophiostoma bicolor,*** fungal diseases, *Picea abies,* Norway, insect pests, disease vectors 10014
- ***Ophiostoma brunneo-ciliatum,*** fungal diseases, *Pinus sylvestris,* water stress, France 1934
- ***Ophiostoma clavigerum,*** fungal diseases, *Pinus contorta,* Canada, insect pests, *Dendroctonus* 6637
- ***Ophiostoma himal-ulmi,*** new species, fungal diseases, *Ulmus wallichiana,* India 8295
- ***Ophiostoma montium,*** fungal diseases, *Pinus contorta,* Canada, insect pests, *Dendroctonus* 6637
- ***Ophiostoma novo-ulmi***
  - fungal diseases
    - *Ulmus*
      - pathogenicity 4018
      - UK, disease vectors 5633
    - *Ulmus glabra,* Norway, vectors 2346
    - *Ulmus minor,* foliage, chemistry, ceratoulmin 2269
    - *Ulmus procera,* Portugal 9103
- ***Ophiostoma penicillatum,*** fungal diseases, *Picea abies,* Norway, insect pests, disease vectors 10014
- ***Ophiostoma piceae***
  - fungal diseases
    - *Quercus,* forest decline, Europe 4020
    - taxonomy 5636
- ***Ophiostoma polonicum***
  - fungal diseases
    - *Picea abies*
      - Norway
        - disease vectors, *Ips typographus* 10015
        - insect pests, disease vectors 10014
        - pruning
          - plant physiology 10015
          - resistance 10015
- ***Ophiostoma pseudotsugae,*** fungal diseases, *Pseudotsuga menziesii,* USA, disease vectors 5661
- ***Ophiostoma querci***
  - fungal diseases
    - *Quercus*
      - cavitation 4511
      - forest decline, Europe 4020
    - taxonomy 5636
- ***Ophiostoma roboris,*** fungal diseases, *Quercus robur,* Europe 7398
- ***Ophiostoma ulmi***
  - fungal diseases
    - *Ulmus*
      - Australia 4980
      - biological control 10023
      - France, spread, damage 4019
      - resistance, tree breeding, reviews 5565
      - susceptibility, testing 5012
      - tissue culture, callus, resistance 5635
      - UK, disease vectors 5633
- ***Ophiostoma ulmi*** *cont.*
  - fungal diseases *cont.*
    - *Ulmus americana*
      - susceptibility, testing, tissue culture 4863
      - USA, hybrids, resistance 1456
    - *Ulmus minor,* foliage, chemistry, ceratoulmin 2269
- **Opossums,** Didelphidae, seed dispersal, *Cecropia obtusifolia,* Mexico 6506
- ***Oracella acuta,*** insect pests, *Pinus taeda,* USA 7438
- ***Orbignya phalerata,*** fruits, rural economy, Brazil 7799
- ***Oreopanax,*** choice of species, forestry development, South America, handbooks 2551
- **Organizations**
  - computer techniques, South Africa 7686
  - environmental protection, Iran 1874
  - forest administration
    - Central Europe 9660
    - Iran 1874
  - forest trees, seeds, biodiversity, conservation, Australia 8549
  - forestry
    - forest administration 3340
    - research, Poland, bibliographies 6792
    - sustainability, research, India 5044
  - research, South Africa 7708
  - silviculture, Swaziland, handbooks 7699
  - Switzerland 38
- ***Orgyia leucostigma,*** insect pests, biological control, parasitoids 9193
- ***Orgyia pseudotsugata***
  - insect pests
    - *Abies lasiocarpa,* USA, damage 7459
    - conifers, Canada, control 5797
- ***Ormosia,*** chemotaxonomy, Latin America, alkaloids 4742
- **Ornamental woody plants** (*see also* Christmas trees; Street trees)
  - *Acer,* shoot cuttings 10150
  - *Amelanchier,* silvicultural characters, Canada 2436
  - bamboos
    - *Himalayacalamus hookerianus*
      - taxonomy
        - New Zealand 8453
        - UK 8453
  - container grown plants, irrigation, USA 6756
  - *Cornus florida,* provenance trials, USA 5910
  - Croatia 4987
  - diseases, plant disorders, books 8467
  - *Forsythia viridissima,* Korea Republic 9310
  - fungal diseases, *Discula destructiva, Cornus,* USA, resistance 8311
  - integrated pest management, USA, books 6788
  - Mexico 1589
  - plant morphology, development, analysis 1208
  - pollen, spread, Italy, coastal areas 5912
  - pruning
    - books 10154
    - grafting, books, techniques 5917
    - plant morphology, techniques 7610
  - shoot cuttings, landscape, Canada 6041
  - silvicultural characters, USA 8456
  - *Taxus baccata,* botany, genetic resources, reviews 1202
  - *Tilia,* arboriculture 9309
  - transplanting, *Corylus colurna,* drought, root hydraulic conductivity 6755
  - weed control, nurseries, UK 1730
- ***Oryctanthus,*** mistletoes, seed dispersal, forests, Colombia 1469
- ***Oryctolagus cuniculus***
  - rabbits
    - *Acacia oswaldii,* natural regeneration, Australia 4928
    - forest plantations, Australia, control, books 6787
- ***Ostrya carpinifolia***
  - coppice, yield tables, Italy 2711
  - mycorrhizas, *Tuber magnatum,* Italy 6609

- ***Ostrya carpinifolia*** *cont.*
  - palaeoecology, plant succession, Greece 8989
  - phenology, synecology, Italy 9957
  - seed germination
    - seed treatment, Poland 856
    - storage 6874
  - vegetation, surveys, soil types, Italy 303
- ***Ostrya virginiana***
  - control, woody weeds, herbicides, USA 1766-1767
  - pollen analysis, palaeoecology, USA 3888
- ***Otomys irroratus,*** rodents, *Pinus patula,* South Africa, forest plantations, control 1516
- ***Ouratea,*** taxonomy, Venezuela 7238
- ***Ouratea scottii,*** taxonomy, South America 4741
- ***Ouratea spectabilis,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- **Outplanting,** *Pinus sylvestris,* seedlings, roots, plant physiology 3802
- **Ownership** (*see* Forest ownership; Private forestry; Social forestry)
- ***Oxyanthus speciosus,*** foliage, chemistry, glucosides 9818
- ***Oxycarenus lavaterae,*** insect pests, *Tilia cordata,* Yugoslavia 2314
- ***Oxydendrum arboreum***
  - dwarfism, witches' brooms, morphogenesis 6397
  - foliage, stand characteristics, browse, nutritive value 3196
- ***Oxydia trychiata,*** insect pests, *Pinus,* forest plantations, Venezuela 6645
- ***Oxyops vitiosa,*** insect pests, *Melaleuca quinquenervia,* USA, biological control 6933
- ***Ozoroa paniculosa***
  - fruits, development 3719
  - seed development 3720
  - Southern Africa, autecology 3719
- ***Pachypappa tremulae,*** insect pests, *Picea abies,* UK, roots, air pollution 4573
- ***Pachypappa vesicalis,*** insect pests, *Picea abies,* UK, roots, air pollution 4573
- **Pacific Ocean,** mangrove forests, forest ecology 3911
- **Pacific Rim**
  - rain forests, nature conservation, planning, traditional society 2426
  - *Santalum* 4168
- **Pakistan**
  - *Abies pindrow*
    - natural regeneration, canopy, light 5465
    - site preparation, weed control, artificial regeneration 5132
  - *Avicennia marina,* foliage, chemistry, seasonal variation, aging 7192
  - broadleaves, aquatic fungi, endophytes 8253
  - *Dalbergia sissoo,* forest nurseries, planting stock, stumps, production 6074
  - deforestation, history 6848
  - *Ficus carica,* multipurpose trees, plant composition, utilization 8908
  - forestry, technology transfer, innovation adoption 3347
  - forests, deforestation, land use, history 5859
  - fungal diseases, amenity trees, seeds 2257
  - insect pests
    - *Acacia catechu,* seeds 5679
    - *Aleurites fordii,* seeds 5679
    - *Caryedon serratus, Acacia tortilis,* seeds 5679
    - *Didia, Bauhinia variegata,* seeds 5679
    - *Hypsipyla robusta, Toona ciliata,* seeds 5679
    - *Pongamia pinnata,* seeds 5679
  - mangroves, *Avicennia marina,* stand characteristics 3961
  - medicinal plants 3473
  - multipurpose trees, species trials, saline soils, reclamation 6014
  - *Paulownia,* phenology, flowers, morphology 6389
- **Pakistan** *cont.*
  - *Populus canadensis,* forest plantations, biomass production, increment, forest litter 9591
  - *Populus deltoides,* spacing, agroforestry 6724
  - street trees
    - air pollution, dust, damage 4550
    - seedling growth, seeds, pollution, vehicles 10155
- **Palaeobotany**
  - *Abies,* pollen, Japan, DNA 9914
  - Antarctica, *Jeffersonioxylon gordonense* 8072
  - *Araucaria,* Asia 4646
  - *Archaeopteris,* plant development 3889
  - *Archaeopteris notosaria,* palaeoclimatology, South Africa 8148
  - *Bursera microphylla,* pollen analysis, Mexico 8147
  - *Callixylon,* plant development 3889
  - *Chamaecyparis,* Canada 6527
  - conifers, Russia 3890
  - Fabaceae, Mexico 511
  - *Fouquieria columnaris,* pollen analysis, Mexico 8147
  - height, equations 512
  - *Litocarpon beardii,* Canada 8051
  - mangroves
    - America, reviews 6528
    - Neotropical Region 6533
  - *Nothofagus plicata,* Australia 8144
  - palynology 508
  - *Phyllocladopitys petriellae,* Argentina 8142
  - *Picea nakauchii,* Japan, foliage, anatomy 5441
  - *Pinus,* flowers, Canada 5378
  - Podocarpaceae, foliage, morphology, taxonomy, Australia 497
  - *Protofagacea allonensis,* USA 5377
  - vegetation
    - history
      - Australia, books 6770
      - pollen analysis, plant succession, Finland 3063
- **Palaeoclimatology**
  - *Archaeopteris notosaria,* palaeobotany, South Africa 8148
  - boreal forests, palaeoecology 507
  - deforestation, Africa 7569
  - *Salix herbacea,* stomata, density, carbon dioxide, atmosphere 3538
- **Palaeoecology**
  - *Abies,* wood anatomy, Japan 8990
  - *Abies alba,* genetic variation, Switzerland 7343
  - *Acacia,* Australia 3885
  - angiosperms, woody plants, Antarctica 8143
  - Betulaceae, pollen analysis, USA 3888
  - boreal forests, palaeoclimatology 507
  - Canada 4757, 6532
  - Casuarinaceae, Australia 3885
  - conifers, stomata, Canada 8146
  - *Eucalyptus*
    - Australia 3885
    - rain forests, Australia 2132
  - forest ecology, plant succession, USA 6531
  - forests, understorey, geographical distribution, Japan 1349
  - grasslands, *Nothofagus,* geographical distribution, New Zealand 4765
  - *Juniperus occidentalis,* plant colonization, USA 9917
  - *Juniperus scopulorum,* USA 3893
  - Kazakhstan 3891
  - mangrove swamps, USA 6529
  - mangroves, *Avicennia marina,* pollen analysis, New Zealand 4759
  - mixed forests, pollen analysis, USA 8992
  - *Nothofagus,* foliage, length, Australia 3065
  - palynology 508
    - conferences 17
  - peatlands, USA 8150
  - *Picea,* wood anatomy, Japan 8990
  - *Picea abies*
    - boreal forests, stand characteristics, Sweden 7259
- **Palaeoecology** *cont.*
  - *Picea abies cont.*
    - pollen analysis, Sweden 3068
    - vegetation, history, dendrochronology, Sweden 7613
  - *Picea mariana,* peatlands, Canada 8149
  - *Pinus flexilis,* gas exchange, simulation, USA 4706
  - *Pinus strobus,* North America 8151
  - *Pinus sylvestris*
    - Spain 8991
    - Sweden 3066
  - plant succession, Greece 8989
  - *Platanus,* wood anatomy, West Asia 1348
  - pollen analysis
    - Mexico 8147
    - vegetation
      - history
        - simulation, theory 2128
        - Spain 2133
        - UK 3062
  - *Quercus,* wood anatomy, Japan 8990
  - tropical forests
    - forest litter, analysis, Peru 3887
    - Panama, prehistoric agriculture 4761
    - pollen analysis
      - Africa 3067
      - South America 3067
  - USA 4758
  - USSR, reviews 6530
  - vegetation, pollen analysis, UK 8145
- ***Palaquium javense,*** Indonesia, wood chemistry 2059
- ***Palaquium leiocarpum,*** seedlings, identification, Indonesia 1324
- ***Palicourea guianensis***
  - canopy gaps, transpiration, regulation, Panama 6302
  - sap flow, Panama, equipment 6298
- ***Paliurus***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- **Palynology**
  - palaeobotany 508
  - palaeoecology 508
    - conferences 17
  - vegetation types, USA 3881
- **Panama**
  - agroforestry, development projects, databases 10109
  - *Anacardium excelsum,* transpiration, humidity 3614
  - *Bombacopsis quinata,* growth models 218
  - broadleaves
    - canopy gaps, transpiration, regulation 6302
    - forest litter, decomposition, drought 1916
    - photosynthesis, light penetration, seedlings, morphology 3792
    - sap flow, equipment 6298
  - *Casuarina cunninghamiana,* growth models 219
  - *Ceiba pentandra,* photosynthesis, plant water relations, carbon 4697
  - *Conceveiba parvifolia,* new species 9903
  - *Ficus,* wood anatomy, hydraulic conductivity, life form 5373
  - foliage, development, nitrogen, tropical forests 315
  - forest trees
    - crown, buttresses 2958
    - seedlings, light, predation, growth 3100
    - ultraviolet radiation, plant physiology 6257
  - fungal diseases, cankers, *Ocotea whitei* 2272
  - insect pests, *Carmenta foraseminis, Gustavia superba,* seeds 7458
  - mangroves
    - *Rhizophora mangle*
      - oil spills
        - damage, ecology 4575, 4577, 6357
        - persistence 4576
  - nature conservation, development projects 9299

- **Panama** *cont.*
  - old-growth forests, seed banks, methodology 6581
  - *Psychotria,* water availability, phenology, carbohydrates 7946
  - *Psychotria horizontalis*
    - genotype environment interaction
      - precipitation
        - plant morphology 1880
        - plant physiology 1880
  - rain forests
    - canopy gaps, population dynamics, simulation 5466
    - forest trees, water uptake 5283
  - *Rustia dressleri,* taxonomy 7235
  - *Scheelea zonensis,* seed predation, rodents 6509
  - *Tachigali versicolor,* seed dispersal, seedlings, recruitment 483
  - tropical forests
    - forest ecology, books 5932
    - irrigation, insects 2123
    - natural regeneration, recruitment, mortality 3120
    - palaeoecology, prehistoric agriculture 4761
  - understorey, light intensity, experimental equipment 784
  - *Votomita cupuliformis,* new species 9904
- ***Pandanus krauelianus,*** rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
- ***Pangium edule,*** wood chemistry, Indonesia 6448
- ***Panolis flammea,*** insect pests, *Pinus sylvestris,* Russia, damage 4885
- ***Panonychus citri,*** mites, *Ilex crenata,* habit, Japan, population dynamics 667
- ***Papilio canadensis***
  - insect pests
    - broadleaves, USA 5712
    - *Salix,* foliage, USA 4032
- **Papua New Guinea**
  - broadleaves
    - photosynthesis, photoinhibition, simulation, canopy gaps 1287
    - rain forests, canopy gaps, photoinhibition 1287
    - stem form, buttresses, plant competition 3876
  - forest management, planning, sustainability 4413
  - Formicidae, *Camponotus quadriceps, Endospermum labios,* insect pests, interactions 1473
  - *Mimosa invisa,* woody weeds, biological control 1760
  - mountain forests, disturbed land, plant succession, synecology 3104
  - rain forests, nature conservation, planning, traditional society 2426
  - *Rosselia bracteata,* taxonomy, new genus 8964
- **Paraguay**
  - forest trees, endangered species 1577
  - *Ilex paraguariensis,* agroforestry, economics 1560
  - savannas, deforestation 5000
  - wetlands 1378
- ***Paralongidorus sali,*** plant parasitic nematodes, *Shorea robusta,* India, damage 5779
- ***Paranthrene robiniae,*** insect pests, Salicaceae, USA, insecticides 5792
- ***Paranthrene tabaniformis***
  - insect pests
    - *Populus*
      - galls, Bulgaria, ecology 643
      - Italy, monitoring, chemical control 6652
- ***Parapiptadenia ilheusana,*** taxonomy, Brazil, new species 8960
- ***Paraserianthes falcataria***
  - afforestation
    - reclaimed land, Singapore 4095
    - site preparation, fertilizers, Indonesia 7781
  - agroforestry, choice of species, development projects, Cameroon 6734
  - foliage, chemistry, fodder, India 7170
- ***Paraserianthes falcataria*** *cont.*
  - forest litter, decomposition, fungi, India 2822
  - forest nurseries, growing media, phosphorus fertilizers, Indonesia 903
  - forest plantations
    - forest litter, measurement, Philippines 1910
    - soil properties, India, factor analysis 9686
  - fruits, morphology, seeds, morphology, seed germination 6075
  - increment, acid soils, lime, agroforestry, Indonesia 4113
  - insect pests
    - *Apogonia expeditionis,* Indonesia, chemical control 8349
    - *Indarbela quadrinotata,* Bangladesh, chemical control 6666
    - surveys
      - forest nurseries, India 2300
      - forest plantations, India 2300
  - reclamation
    - degraded forests, development, Indonesia 7560
    - eroded soils, community forestry, choice of species, Indonesia 3237
    - mined land, species trials, agroforestry, Peninsular Malaysia 3241
  - seed germination, seed treatment, seed dormancy 7729
  - species trials
    - agroforestry, acid soils, Cameroon 2542
    - fodder, production, Indonesia 3371
  - wood anatomy 402
- ***Paraserianthes lophantha,*** woody weeds, control, South Africa 8646
- ***Parashorea lucida,*** wood anatomy 414
- ***Parashorea malaanonan,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Parashorea melaanonan,*** wood anatomy 414
- ***Parasitaxus ustus,*** parasitic plants, *Falcatifolium taxoides,* New Caledonia, host parasite relationships, morphology 9128
- **Parasitic plants** (*see also* Mistletoes)
  - *Parasitaxus ustus, Falcatifolium taxoides,* New Caledonia, host parasite relationships, morphology 9128
  - Sahel 8322
  - *Santalum album,* silviculture, India, host parasite relationships 186
- ***Paratylenchus microdorus,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Parinari,*** species trials, reclamation, mined land, Venezuela 6711
- ***Parkia biglobosa***
  - canopy
    - soil fertility
      - mycorrhizas
        - Burkina Faso 10101
        - Nigeria 10101
- ***Parkia pendula***
  - plant water relations, water stress, drought resistance 2570
  - seed treatment, temperature, seed germination 2570
- ***Parkinsonia,*** foliage, anatomy, taxonomy 8067
- ***Parkinsonia aculeata***
  - in vitro culture, development projects, Djibouti 9444
  - plant water relations, water stress, seedling growth, root shoot ratio 1112
  - seed germination, seed treatment 85
  - seedling growth, seeds, pollution, vehicles, Pakistan 10155
- ***Paropsides soriculata,*** insect pests, *Crataegus,* China, biology 9166
- ***Parrotia persica,*** bacterial diseases, *Pseudomonas syringae,* Iran 8315
- ***Parthenocissus quinquefolia,*** woody weeds, USA, *Liquidambar styraciflua* 6122
- **Parthenogenesis,** *Picea abies,* tissue culture 4279
- **Participation,** forest management, decision making, Finland 4430
- ***Pasania*** (*see Lithocarpus*)
- **Passeriformes,** birds, forests, fragmentation, Spain 4063
- **Pastures** (*see* Grazing)
- ***Paullinia cupana,*** genetic variation, plant morphology, Brazil 587
- ***Paulownia***
  - agroforestry, China 3267, 5881
  - height, increment, India 156
  - mycoplasmal diseases, tissue culture 5669
  - seed morphology, testas 3721
- ***Paulownia australis,*** phenology, flowers, morphology, Pakistan 6389
- ***Paulownia elongata***
  - agroforestry, China 5881
  - phenology, flowers, morphology, Pakistan 6389
- ***Paulownia fargesi,*** phenology, flowers, morphology, Pakistan 6389
- ***Paulownia fortunei***
  - agroforestry, China 5881
  - clones, wood properties, China 4259
  - fungal diseases, *Rhizoctonia solani,* India, seedlings 3163
  - phenology, flowers, morphology, Pakistan 6389
  - provenance trials, USA 3366
  - seed germination, seed treatment 8570
- ***Paulownia kawakamii,*** seed germination, seed treatment 8570
- ***Paulownia taiwaniana***
  - molecular genetics, taxonomy 5531
  - seed germination, seed treatment 8570
- ***Paulownia tomentosa***
  - farm forestry
    - investment, economic analysis, USA, computer techniques 37
    - USA, investment, economic analysis, computer techniques 37
  - phenology, flowers, morphology, Pakistan 6389
  - provenance trials, USA 3366
  - seed germination
    - seed dormancy, electron transfer, redox reactions 855
    - seed treatment 8570
  - stump removal, chemical treatment 5133
- ***Paxillus involutus***
  - mycorrhizas
    - *Betula pendula* 8283
      - biochemistry, proteins 5571
      - reclamation, UK 4096
    - forest trees
      - chemistry 8274
      - soil pH, nutrition physiology 5583
    - *Pinus,* plant nutrition, nitrogen 5604
    - *Pinus contorta,* competition 8271
    - *Pinus resinosa,* genetic transformation 9078
    - *Pinus sylvestris,* Netherlands 9074
- ***Payena acuminata,*** seedlings, identification, Indonesia 1324
- **Peat,** formation, mangrove forests, climatic change, Caribbean 6270
- **Peat soils**
  - conifers
    - nitrogen fertilizers
      - Canada
        - distribution 3411
        - uptake 3410
- **Peatlands**
  - *Alnus glutinosa,* swamps, synecology, Latvia 1381
  - drainage, soil air, methane, Canada 9510
  - energy sources, greenhouse effect 4250
  - nature conservation
    - Europe, books 6781
    - Switzerland, books 6781
  - *Picea abies,* forest influences, forest economics, carbon cycle, Norway 2784
  - *Picea sitchensis,* afforestation, carbon cycle, UK 2633
  - *Pinus sylvestris*
    - afforestation, forestry practices, climate, Sweden 6112
    - fertilizers, increment, plant composition, Finland 6068

- **Peatlands** *cont.*
  - *Pinus sylvestris cont.*
    - forest influences, forest economics, carbon cycle, Norway 2784
    - increment, plant nutrition, Sweden 9934
    - roots, dynamics, cycling, Finland 407
    - soil chemistry, drainage, Finland 3571, 9509
  - reclamation, afforestation, Poland 714
  - *Salix,* plant colonization, USA 9020
  - silviculture, reviews 8469
- ***Pelliciera,*** palaeobotany, America, reviews 6528
- ***Pelliciera rhizophoreae,*** plant water relations 8817
- ***Peltogyne chrysopis,*** taxonomy, Brazil 4740
- ***Peltogyne venosa,*** photosynthesis, soil fertility, Guyana 7193
- ***Peltophorum africanum,*** species trials, reclamation, mine spoil, India 4949
- ***Peltophorum inermis,*** plant morphology, meiosis, India, variation 4650
- ***Peltophorum pterocarpum***
  - air pollution, damage, urban areas, India 6328
  - pruning trash
    - chemistry
      - decomposition
        - agroforestry
          - Indonesia 1939
          - laboratory tests 1939
  - seed collection, seed treatment, seed germination, India 1680
- ***Penicillium nodositatum,*** root nodules, *Alnus incana,* infection, root hairs 599
- ***Penicillium vermoesenii,*** fungal diseases, *Washingtonia filifera,* infection, injuries 2258
- **Peninsular Malaysia**
  - *Acacia,* species trials, reclamation, mined land 3240
  - *Acacia auriculiformis*
    - provenance trials 9420
      - plant morphology, growth 5050
  - *Acacia mangium,* reclamation, mined land, species trials, agroforestry 3241
  - afforestation, vegetative propagation, shoot cuttings 6046
  - bamboos, *Gigantochloa scortechinii,* stand characteristics, biomass production 6962
  - *Bruguiera hainesii,* pollination, birds 1315
  - canes and rattans, planting 976
  - Dipterocarpaceae
    - forests, selective felling, fruiting 8127
    - tropical forests, biomass, estimation 8706
  - *Dryobalanops aromatica,* seed germination, growing media 7730
  - *Dryobalanops sumatrensis,* increment, silviculture, plantations 2698
  - ectomycorrhizas, *Pisolithus tinctorius, Hopea,* growth 3148
  - forest administration, legislation, regulation 6858
  - forest trees, non-wood forest products, forest economics 963
  - *Gmelina arborea,* tree breeding, progeny testing, heritability, genetic gain 7363
  - *Jasminum,* taxonomy 7232
  - *Leucaena,* species trials, reclamation, mined land 3240
  - logging
    - streams, water quality 7109
    - watersheds, erosion 7110
  - mangroves, plant morphology, allometry 6427
  - *Paraserianthes falcataria,* reclamation, mined land, species trials, agroforestry 3241
  - *Pentaspadon motleyi,* rain forests, natural regeneration, canopy 8183
  - primates, tropical forests, logging effects 9203
  - rain forests
    - nature conservation 731
    - species diversity, soil fertility 1379
- **Peninsular Malaysia** *cont.*
  - reclamation, mined land 3239
  - remote sensing, Landsat, thematic mapper, deforestation 8738
  - *Shorea*
    - flowering 472
    - genetic variation 6603
    - increment, silviculture, plantations 2698
    - swamps, silvicultural systems 8606
  - *Shorea macroptera,* seed germination, growing media 7730
  - *Tectona grandis,* seed orchards, tree breeding, budding 7742
  - vegetation types, soil fertility, foliage, morphology, plant nutrition 6551
- ***Pentaclethra macroloba***
  - afforestation, pastures, Costa Rica, stem form, growth 5051
  - genetic variation, gene flow, Costa Rica 3139
- ***Pentaclethra macrophylla,*** ultisols, fertilizers, seed size, pot experimentation 7758
- ***Pentaspadon motleyi,*** rain forests, natural regeneration, canopy, Peninsular Malaysia 8183
- ***Peraxilla tetrapetala,*** mistletoes, *Nothofagus solandri,* New Zealand 4878
- ***Pericalymma ellipticum,*** seed germination, temperature 76
- **Periderm,** *Eucalyptus gunnii,* enzymes 460
- ***Peridermium harknessii*** (*see Endocronartium harknessii*)
- **Periodicals**
  - agroforestry, Vietnam 9316
  - canes and rattans, research, networks 6767
  - ecology 4143
  - environment, history 4995
  - forest economics 4994
  - forestry 7617
    - Ghana 4993
    - landscape, Europe 743
    - Sweden 2443
  - land use 7617
  - nature conservation 7617
  - wildlife 9317
- ***Periphyllus californiensis,*** insect pests, *Acer amoenum,* Japan, development, growth 4880
- **Permafrost,** boreal forests, climatic change, Canada 7871
- ***Peromyscus leucopus,*** mice, USA, habitats 7539
- ***Peromyscus maniculatus,*** mice, USA, habitats 7539
- ***Peronema canescens***
  - choice of species, soil fertility, Indonesia 825
  - shoot cuttings, liquid fertilizers, Indonesia 1687
  - species trials, firebreaks, Indonesia 2000
- ***Persea,*** insect pests, *Lasioptera yadokariae,* Japan 7493
- ***Persea bombycina,*** essential oils, foliage 6438
- ***Persea indica***
  - silvicultural characters, Canary Islands 8888
  - species trials, rehabilitation, Canary Islands 6032
- ***Persea thunbergii***
  - foliage, seeds, provenance, Korea Republic, variation 9978
  - reclaimed land, marine sediments, Japan, stand development 6703
- **Persian Gulf States,** Rutaceae, taxonomy 3045
- ***Persoonia iogyna,*** taxonomy, Australia 7224
- ***Persoonia tropica,*** taxonomy, Australia 7224
- **Persooniinae,** taxonomy, Australia 7225
- ***Perthida glyphopa***
  - insect pests
    - *Eucalyptus marginata*
      - Australia 5703
        - biology 5731
      - forest fires, Australia 6653
- **Peru**
  - Asteraceae, flora 7247
- **Peru** *cont.*
  - bamboos, *Chusquea,* rain forests, forest ecology 538
  - broadleaves, seedlings, morphology, identification, secondary forests 6431
  - *Cedrela odorata,* increment, light, simulation 6167
  - *Desmodium ovalifolium,* improved fallow, plant colonization, biomass production 3266
  - forest management, development projects, economics, community forestry 8545
  - forestry, women 817
  - *Froesia diffusa,* taxonomy 491
  - *Inga edulis,* improved fallow, plant colonization, biomass production 3266
  - insect pests, *Leuronota calycophylli, Calycophyllum spruceanum,* damage 5698
  - *Jacaranda copaia,* secondary forests, natural regeneration, stand structure 6578
  - legislation, forestry, wildlife 818
  - *Polylepis incana,* chemotaxonomy 5436
  - rain forests
    - age, forest litter, measurement 6286
    - classification, remote sensing, thematic mapper 3511
    - Melastomataceae, botanical composition, soil types 3940
    - remote sensing, image processing 2765
    - throughfall 6251
  - riparian forests, flooding, plant succession, geographical distribution 5467
  - tropical forests
    - hunting
      - nature conservation, deforestation 5812
      - sustainability 5816
    - palaeoecology, forest litter, analysis 3887
  - ungulates, seed dispersal, seed predation, tropical forests 685
  - wildlife, birds, habitats, feeding behaviour 6676
- **Pest management,** arboriculture, USA, standards, public opinion 4136
- **Pest resistance,** insect pests, *Bupalus piniarius, Pinus sylvestris,* air pollution, Germany 8335
- ***Pestalotia,*** fungal diseases, *Eucalyptus,* Indonesia, control 2280
- ***Pestalotiopsis,*** fungal diseases, *Prosopis,* USA 10003
- ***Pestalotiopsis funerea,*** fungal diseases, *Thuja orientalis,* Italy 2266
- ***Pestalotiopsis versicolor,*** fungal diseases, *Artocarpus heterophyllus,* Bangladesh, foliage 6636
- **Pesticide residues**
  - *Picea abies,* foliage, Finland 6455
  - *Pinus sylvestris,* foliage, Europe 5343
- **Pesticides**
  - forest nurseries, safety, Nepal 6899
  - forest plantations, water pollution, Australia, buffer zones 6358
  - forestry, Germany 5673
  - mycorrhizas, *Glomus etunicatum, Eucalyptus grandis,* toxicity 602
  - residues, forests, soil pollution, Germany 305
- **Pests**
  - *Casuarina,* books 2448
  - *Platanus acerifolia,* Poland 5618
- ***Petauroides volans,*** marsupials, *Eucalyptus regnans,* forest management, Australia 1525
- ***Petrea,*** taxonomy, Latin America 3046
- ***Petrogale penicillata,*** marsupials, forests, New Zealand, control, water pollution 1506
- ***Phacidium infestans***
  - fungal diseases
    - *Pinus sylvestris*
      - mortality, stand density 5665
      - natural regeneration, damage, Finland 10061

- ***Phaeocryptopus gaeumannii,*** fungal diseases, *Pseudotsuga menziesii,* Netherlands, spread 1464
- ***Phaeolus schweinitzii***
  - fungal diseases
    - *Larix leptolepis,* Japan, damage 4857
    - *Pinus nigra,* tissue culture, defence mechanisms 8287
- ***Phallus impudicus***
  - forest litter, deciduous forests, cycling, phosphorus, UK 9713
  - fungal diseases, *Fagus sylvatica,* temperature 4861
- ***Phanerochaete velutina***
  - decay fungi, *Fagus,* cycling, phosphorus, laboratory tests 8766
  - forest litter, deciduous forests, cycling, phosphorus, UK 9713
  - fungal diseases, *Fagus sylvatica,* temperature 4861
- ***Phasianus colchicus,*** birds, USA, introduced species, ecology 7527
- **Pheasants,** habitats, Korea Republic 9223
- ***Phellinus pilatti,*** fungal diseases, *Populus alba,* Italy, damage, new species 10006
- ***Phellinus pini,*** fungal diseases, conferences 3311
- ***Phellinus torulosus,*** fungal diseases, *Cupressus sempervirens,* Italy 5626
- ***Phellinus tremulae***
  - fungal diseases
    - *Populus tremula,* Sweden, population genetics 8289
    - *Populus tremuloides*
      - Canada 8345
      - galls, Canada 5623
- ***Phellinus weirii***
  - fungal diseases
    - conferences 3311
    - *Pseudotsuga menziesii*
      - Canada, control 9100, 9125
      - grafting, plant composition, disease resistance 1455
      - stand characteristics, USA 4856
      - urea fertilizers, USA 4299
- ***Phellodendron amurense,*** medicinal plants, East Asia, antibacterial properties 1813
- ***Phellodendron wilsonii,*** seed dormancy, germination, composition, abscisic acid 2563
- **Phenology**
  - *Acacia,* climate, site factors, soil water, Australia 3707
  - amenity trees
    - roots, transplanting 5908
    - USA 6390
  - *Betula pendula*
    - foliage, defoliation, plant nutrition, temperature 4617
    - shoots, temperature, genetic variation 8041
  - *Brachylaena huillensis,* reproductive behaviour, Kenya 3833
  - broadleaves
    - buds, plant water relations, Costa Rica 2929
    - foliage, photosynthesis, plant water relations, Venezuela 4704
    - history, UK 6393
    - plant water relations, drought, Costa Rica 2838
    - reproductive behaviour, abscission, India 388
    - seedlings, carbon dioxide enrichment, temperature, soil fertility 7864
    - stand development, climate, light, Italy 8665
    - synecology, Italy 9957
  - browse, foliage, biomass production, variation, Mali 7148
  - buds, climatic change, climatic zones, simulation 7865
  - *Cavanillesia platanifolia,* secondary forests, forest litter, Colombia 1205
  - *Cercidium microphyllum,* flowering, USA 3030
  - cerrado, synecology, Brazil 8995
  - climatic change, frost resistance, simulation, Western Europe 2804
  - conifers, buds, climatic change, provenance trials, Finland 2009
- **Phenology** *cont.*
  - deciduous forests, reproductive behaviour, seasonality, Temperate Zones 8126
  - *Fagus crenata,* seeds, Japan, meteorological factors 9879
  - *Fagus sylvatica,* buds, dormancy, stand density, Slovakia 7145
  - *Ficus,* Venezuela, developmental stages 9779
  - flowering, Germany 9780
  - foliage, crown, development, photosynthesis, theory 8042
  - forest trees
    - climate, Argentina 1210
    - climatic change, Europe 4618
    - flowering, fruiting, Venezuela 5368
    - savanna woodlands, plant nutrition, Zambia 6308
    - Slovakia 7144
  - *Fraxinus excelsior,* defoliation, shoots, growth 3711
  - fungal diseases, *Melampsora populnea, Pinus pinaster,* provenance, host parasite relationships 4256
  - growth rate, *Betula pendula,* tree breeding, progeny testing, Finland 9980
  - insect pests, *Zeiraphera canadensis, Picea glauca,* Canada 647
  - *Larix leptolepis,* altitude, Japan 8889
  - *Leucadendron rubrum,* plant growth regulators, cytokinins, sex, South Africa 3778
  - mangroves
    - *Aegiceras corniculatum,* forest litter, Australia 3704
    - *Avicennia marina,* forest litter, Australia 3704
  - *Paulownia,* flowers, morphology, Pakistan 6389
  - *Picea abies*
    - seedling growth, genetic variation, photoperiodism, temperature 8040
    - tree breeding
      - early selection, increment 3132
      - progeny testing, frost resistance, Norway 568
  - *Picea mariana*
    - genetic variation, seedling growth, Canada 3980
    - provenance trials, seedling growth 3374
  - *Picea sitchensis,* buds, carbon dioxide enrichment, temperature, UK 2008
  - *Pinus radiata*
    - foliage, New Zealand 2010
    - increment 5176
  - *Pinus sylvestris,* frost injury, increment, climatic change, simulation 7040
  - *Populus trichocarpa,* photoperiodism 6489
  - prediction, broadleaves, simulation, USA 387
  - primates, feeding behaviour, Brazil 3220
  - *Prosopis caldenia,* climate, Argentina 1210
  - *Pseudotsuga menziesii*
    - genetic variation, cambium, USA 4828
    - tree breeding, wood density, USA 4829
  - *Psychotria,* water availability, carbohydrates, Panama 7946
  - *Quercus ithaburensis,* foliage, genetic variation, Israel 3709
  - *Quercus petraea,* provenance trials, frost resistance, UK 9412
  - *Quercus suber,* Portugal 5367
  - rain forests
    - French Guiana 6388
    - seeds, Mexico 473
  - remote sensing, vegetation, Africa, simulation 9631
  - seasonality, forest trees, conferences 7639
  - tropical forests
    - flowering, classification 2928
    - foliage, seasonality, climatic change 8043
    - reproductive behaviour, India 2102
- **Phenology** *cont.*
  - woody plants, rain forests, climate, Chile 2930
- ***Phialocephala compacta,*** endophytes, *Alnus glutinosa,* Germany 9068
- ***Phialocephala scopiformis,*** endophytes, *Picea abies,* Germany 9068
- ***Philander opossum,*** opossums, seed dispersal, *Cecropia obtusifolia,* Mexico 6506
- ***Philidris,*** kerangas, *Dischidia major,* Malaysia, mutualism 9134
- **Philippines**
  - *Acacia mangium,* provenance trials, disease resistance, pest resistance, survival 6016
  - agroforestry
    - education, international cooperation 9267
    - soil conservation 8435
  - bamboos
    - *Bambusa blumeana,* afforestation, grasslands 8394
    - plantations, demonstration forests 9563
  - *Cassia spectabilis*
    - agroforestry, nitrogen fixation 4115
    - green manures, decomposition, agroforestry 2418
  - Chiroptera, Pteropodidae, *Ficus chrysolepis,* seed dispersal 686
  - community forestry, development projects, non-governmental organizations, conferences 774
  - *Desmanthus virgatus,* agroforestry, erosion control 5873
  - development projects
    - afforestation 5980
    - environmental protection, logging, planning, economics 46
  - Dipterocarpaceae, underplanting, forest plantations 8624
  - farm forestry, surveys, trees, products, utilization 1548
  - forest policy, economic development 9392
  - forestry, loans, environmental degradation 2781
  - *Gliricidia sepium*
    - agroforestry, nitrogen fixation 4115
    - green manures, decomposition, agroforestry 2418
  - insect pests
    - *Acacia mangium* 3185
    - *Acizzia, Acacia,* damage 2310
    - *Agrilus sexsignatus, Eucalyptus deglupta,* damage, control 1476
    - *Fergusonina tillyardi, Eucalyptus deglupta,* damage, control 1476
    - *Leucopholis irrorata, Calliandra calothyrsus* 2302
    - Lymantriidae, *Calliandra calothyrsus* 2302
    - *Strepsicrates ejectana, Eucalyptus deglupta,* damage, control 1476
  - *Jasminum,* taxonomy 7232
  - land use, upland areas, deforestation, history 8402
  - multipurpose trees, forest plantations, degraded land, reclamation 8624
  - *Paraserianthes falcataria,* forest plantations, forest litter, measurement 1910
  - *Parashorea malaanonan,* bark, anatomy, taxonomy, identification 413
  - plant parasitic nematodes
    - *Fergusobia tumifaciens*
      - *Eucalyptus deglupta*
        - control 1476
        - damage 1476
  - *Shorea*
    - bark, anatomy, taxonomy, identification 413
    - wood anatomy, taxonomy, identification 412
  - silvicultural systems, selective felling, sustainability, simulation 920
  - vegetation types, hydrology, stream flow, climate 5838
- ***Phillyrea angustifolia,*** reproductive behaviour, sex, Spain, insect pests, *Schizomyia phillyreae* 4735

- ***Phillyrea latifolia***
  - birds, seed dispersal, Spain 477
  - foliage, texture, plant nutrition, Turkey 1224
  - seed dispersal, Formicidae, Italy 3830
  - stand development, Greece 4803
- **Phloem**
  - carbohydrates, forest trees, carbon dioxide enrichment, translocation 7178
  - *Combretum nigricans* 8071
  - *Fagus sylvatica*
    - age of trees, image processing 6398
    - image processing 6399
  - pectins, *Populus canadensis*, France, seasonal variation 3757
  - resins, *Pinus ponderosa*, USA 432
- ***Phloeosinus aubei***, insect pests, conifers, Austria 9167
- ***Phloeosinus thujae***, insect pests, conifers, Austria 9167
- ***Phlomis fruticosa***, foliage, seasonal variation, Greece, morphology, physiology 2047
- ***Phoeba porosa***, wood chemistry, essential oils, Brazil 9801
- ***Phoenix***, vegetation, reclamation, sodic soils, India 712
- ***Phoenix roebelenii***, transplanting, irrigation, water stress, defoliation 4981
- ***Phoma***
  - endophytes, *Taxus wallichiana*, Nepal, medicinal plants 3144
  - fungal diseases, *Fraxinus*, France, control 8286
- ***Phoma etheridgei***, fungal diseases, *Populus tremuloides*, Canada, antagonism, *Phellinus tremulae* 8300
- ***Phoma herbarum***, fungal diseases, *Ixora singaporensis*, India, new host records 9115
- ***Phomopsis occulta***, fungal diseases, *Picea pungens*, USA 8298
- ***Phomopsis scabra***, *Platanus occidentalis*, foliage, infection 5651
- ***Phoracantha semipunctata***
  - insect pests
    - Argentina 2301
    - *Eucalyptus*
      - biological control, USA 7500
      - biology 8344
      - USA
        - distribution 7469
        - resistance 5762
- ***Phoradendron***, mistletoes, seed dispersal, forests, Colombia 1469
- ***Phoradendron juniperinum***, mistletoes, *Juniperus osteosperma*, plant physiology, USA 3800
- ***Phoradendron macrophyllum***, mistletoes, *Juglans* 6641
- **Photoperiod**
  - conifers, foliage, amino acids, temperature, seasonal variation 9842
  - *Pinus pinaster*, seedling growth, temperature, tree breeding 6429
- **Photoperiodism**
  - *Picea abies*, seedling growth, phenology, genetic variation, temperature 8040
  - *Pinus sylvestris*, seedling growth, genetic variation 3972
  - *Populus trichocarpa*, phenology 6489
  - *Pseudotsuga menziesii*, seed germination, seed treatment 6878
  - *Salix pentandra*, plant growth regulators, gibberellins 6488, 8927
- **Photosynthesis**
  - *Abies alba*, foliage, stomata, distribution 2948
  - *Abies amabilis*, light, acclimatization, USA 8930
  - *Acer platanoides*, light, foliage, zeaxanthin 2085
  - *Acer saccharum*
    - air pollution, canopy, USA 9752
    - defoliation, water use efficiency, insect pests 1477
    - light harvesting complexes 3782
    - plant nutrition, soil pH, USA 4710
  - *Alnus glutinosa*, nitrogen fixing trees, pruning, plant composition, growth 8096
- **Photosynthesis** *cont.*
  - *Alnus incana*, water stress, root nodules, nitrogenase 7943
  - *Alnus rubra*, seedling growth, nitrogen fixation, temperature, plant water relations 1294
  - *Betula*, heat tolerance 4688
  - *Betula papyrifera*, thinning, Canada, effects 9516
  - *Betula pendula*
    - carbon dioxide enrichment, temperature, seedling growth, transpiration 2997
    - tissue culture, light, foliage 8581
  - boreal forests, respiration, Canada 8924
  - broadleaves
    - coppice, silvicultural conversion, Italy 8935
    - drought, USA, plant ecological groups 8813
    - foliage
      - Japan, measurement, techniques 3316
      - morphology, USA 4692
      - phenology, plant water relations, Venezuela 4704
      - sugars 6485
    - frost resistance, acclimatization 1886
    - irrigation, leachates, Canada 1753
    - light penetration, seedlings, morphology, Panama 3792
    - Singapore 6467
    - soil fertility, Guyana 7193
    - stomata, transpiration, diurnal variation 456
    - waterlogging, water stress, pot experimentation 4685
  - carbon dioxide
    - increment, books 3297
    - *Pinus sylvestris*, air pollution, Russia 2886
  - carbon pathways, *Clusia minor*, Trinidad and Tobago, seasonal variation 4714
  - *Ceiba pentandra*, plant water relations, Panama, carbon 4697
  - *Chlorophora excelsa*, seedlings, light 3010
  - *Clusia*, Venezuela, metabolism 2990
  - conifers
    - acid deposition, plant growth regulators, benzyladenine 462
    - air pollution
      - Russia 6335
      - sulfur dioxide, reviews 1957
    - foliage, carotenoids, seasonal variation, USA 6477
    - frost resistance
      - acclimatization 1886
      - plant nutrition 8820
    - herbicide resistance, bilanafos, plant nutrition 5138
    - light, temperature 3796
    - shoots, structure, light, carbon dioxide 8109
    - temperature, carbon dioxide enrichment, simulation, measurement 1609
  - *Erythrina variegata*, seedlings, flooding, effects, nitrate reductase 6305
  - *Eucalyptus*, hybrids, cold resistance, acclimatization, Portugal 1890
  - *Eucalyptus globulus*, altitude, increment, India 9682
  - *Eucalyptus grandis*
    - stockplants, light, quality, growth 5221
    - stomata, simulation 6468
    - transpiration, carbon dioxide enrichment 2086
  - *Eucalyptus marginata*, water stress, drought resistance, Australia 1123
  - *Eucalyptus tetrodonta*, carbon dioxide enrichment, light, temperature, vapour pressure 8937
  - *Fagus sylvatica*
    - acid deposition 1156
    - carbon dioxide enrichment, foliage, pH 2084
    - light, water stress, plant morphology 1929
- **Photosynthesis** *cont.*
  - foliage, transpiration, simulation, equations 1620
  - forest trees
    - carbon dioxide enrichment, acclimatization 1283
    - chlorophyll 3788
    - foliage
      - age, Costa Rica 6493
      - plant water relations, Cameroon 313
    - forest influences, carbon dioxide, Japan 7025
    - light, understorey, Japan 6255
    - plant water relations, diurnal variation 3783
    - reviews, photoinhibition 5415
    - seedling growth, foliage, India 1261
  - gas exchange, forest trees, light, Guadeloupe, adaptation 4682
  - *Ginkgo biloba*, gene expression 5513
  - *Gmelina arborea*
    - plant nutrition
      - nitrogen, foliage, growth 1133
      - phosphorus, foliage, growth 1133
  - *Heliocarpus appendiculatus*, foliage, age, light, plant nutrition 6491
  - *Larix decidua*, seedlings, light, enzymes 458
  - *Larix leptolepis*, seedlings, frost resistance, development, light 9663
  - light, temperature, carbon dioxide, *Robinia pseudoacacia*, genetic variation 1267
  - *Liquidambar styraciflua*, foliage, development, ultraviolet radiation 8764
  - mangroves, *Rhizophora apiculata*, treatment 4713
  - *Maranthes corymbosa*, seedlings, carbon dioxide enrichment 1266
  - metabolism
    - *Clusia rosea*, habit, United States Virgin Islands 4700
    - translocation, *Juglans regia*, seedlings, carbon cycle 1257
  - mistletoes, *Tapinanthus vittatus*, *Diplorhynchus condylocarpon*, Zimbabwe 4026
  - Moraceae, foliage, anatomy, light intensity 3731
  - *Morisonia americana*, foliage, development, chemistry, Venezuela 1264
  - mycorrhizas
    - *Laccaria bicolor*, *Pinus strobus* 4849
    - *Leucaena leucocephala*, seedling growth 596
  - phenology, foliage, crown, development, theory 8042
  - photoinhibition
    - broadleaves
      - Papua New Guinea, simulation, canopy gaps 1287
      - rain forests, canopy gaps, Papua New Guinea 1287
    - *Eucalyptus* 464
    - metabolism, *Picea abies*, forest decline, Germany 1291
    - *Picea abies*
      - light
        - frost injury 5408
        - temperature, Germany 1292
      - stress, measurement 7197
    - pigments, *Acer platanoides* 2075
    - *Schefflera arboricola*, stress, measurement 7197
  - photosystem II
    - chlorophyll, fluorescence, measurement, *Fagus sylvatica* 8496
    - *Picea abies*, biochemistry 3008
  - photosystem ii, *Picea abies*, Sweden, spring, recovery 6496
  - photosystem II
    - *Pinus thunbergii*, biochemistry 3004
    - *Quercus petraea*, carbon dioxide enrichment, interactions 2070
  - *Picea*
    - air pollution, simulation, Canada 1973
    - water stress, light 7062

Photosynthesis *cont.*
  Picea abies
    air pollution, foliage, shedding, simulation 5405
    carbon dioxide enrichment
      foliage, pH 2084
      temperature, seedling growth, transpiration 2997
    drought, plant water relations, transpiration, France 5279
    foliage
      shedding, air pollution, Czech Republic 2878
      stomata, distribution 2948
    forest decline, air pollution, Germany 2090
    nitrogen fertilizers, water stress, nutrient uptake 7945
    nutrient deficiencies, magnesium 8097
    seedlings, light, enzymes 458
  Picea glauca, cold storage, water stress, effects 6903
  Picea glauca × *Picea engelmannii*
    planting stock
      seedlings, Canada 1728
      somatic embryogenesis, Canada 1728
  Picea mariana
    container grown plants, gas exchange, water stress 4519
    drought resistance, plant physiology 5230
  Picea rubens
    air pollution, sulfur dioxide 1979
    climatic factors, USA 8934
    heat tolerance, USA, geographical distribution 4478
    seedling growth, carbon dioxide enrichment, plant water relations, soil fertility 1293
  pigments, *Picea abies,* plant nutrition 2079
  Pinus
    age of trees, senescence, USA 2992
    ultraviolet radiation, water stress, Greece 7027
  Pinus banksiana, seedlings, plant nutrition, nitrogen 8111
  Pinus eldarica
    carbon dioxide enrichment
      USA 5226
        growth 3003
  Pinus elliottii, fertilizers, USA, seasonal variation 4695
  Pinus halepensis, air pollution, ozone 6256
  Pinus massoniana, air pollution, sulfur dioxide, foliage, chemistry 3669
  Pinus ponderosa
    carbon dioxide enrichment, biomass, USA 1878
    genetic variation, gas exchange, transpiration, North America 8198
  Pinus radiata, aspect, New Zealand, measurement, carbon isotopes 4694
  Pinus resinosa, growth models 4208
  Pinus strobus
    air pollution, ozone, methodology 3658
    site preparation, controlled burning, USA 1270
  Pinus sylvestris
    age, crown, light, Poland 1278
    air pollution
      Belarus 6352
      damage, Finland, methodology 1259
      water stress, Russia 9751
    climatic change, carbon dioxide enrichment, Finland 7861
    growth, altitude, treelines, UK 2807
    light, shade, simulation 9662
    methodology 5946
    plant nutrition, nitrogen, Finland, seasonal variation 8098
    Russia, edaphic factors 4712
  Pinus taeda
    carbon dioxide enrichment
      nutrient deficiencies 1881
      plant nutrition, phosphorus 4696

Photosynthesis *cont.*
  Pinus taeda cont.
    carbon dioxide enrichment *cont.*
      ultraviolet radiation 2806
    stomata, light 7026
  pith, *Populus* 'Robusta' 1279
  Populus
    biomass production, France 4401
    carbon dioxide enrichment, biomass production, Belgium 8112
    short rotation forestry, growth models, USA 1619
    simulation, sampling 6826
    statistical analysis, diurnal variation, seasonal variation 8936
  Populus alba × *Populus* 'Crandon', genetic transformation, herbicide resistance, glyphosate, increment 6605
  Populus deltoides, foliage, air pollution, sulfur dioxide, nutrient uptake 7183
  Populus maximowiczii × *Populus nigra,* shoots, coppicing, plant nutrition, carbohydrates 7195
  Populus tremula, lichens, Norway, adverse effects 8932
  Populus tremuloides
    air pollution
      ozone
        nutrient deficiencies, nitrogen 3023
        water stress 3023
  Prunus avium, tree guards, water use efficiency 4689
  Pseudotsuga menziesii
    air pollution 2862
    foliage, optical properties, chlorophyll 2066
    genetic variation, gas exchange, transpiration, North America 8198
  Psychotria horizontalis, genotype environment interaction, precipitation, Panama 1880
  Quercus
    carbon dioxide enrichment, plant composition, Italy 4465
    water use efficiency, plant nutrition, USA 6483
  Quercus cerris
    coppice, silvicultural conversion, Italy 8935
    plant water relations, Italy 7194
  Quercus coccinea, air pollution, dust, plant water relations, Greece 6331
  Quercus ilex, water stress, Italy 6256
  Quercus macrocarpa, light, stomatal movement 2991
  Quercus robur
    air pollution, ozone 1969
    carbon dioxide enrichment, gas exchange, growth 6470
  Quercus rubra
    foliage, ozone, seasonal variation 4703
    plant water relations, foliage, USA 1265
  Quercus serrata, light 9844
  remote sensing, stand structure, vegetation types, USA 5199
  respiration, carbon dioxide 2998
  Robinia pseudoacacia
    foliage, air pollution, sulfur dioxide, nutrient uptake 7182
    seedlings
      defoliation, shading, branches 2076
      leaf conductance, stomata, diurnal variation 2077
      plant nutrition
        nitrogen
          foliage 2078
          growth 2078
  Salix, light 451
  Salix viminalis, roots, electrical phenomena in trees 455
  seasonal variation
    mycorrhizas
      Laccaria laccata, Picea abies, seedlings 2249
      Lactarius piperatus, Picea abies, seedlings 2249

Photosynthesis *cont.*
  seasonal variation *cont.*
    mycorrhizas *cont.*
      Pisolithus tinctorius, Picea abies, seedlings 2249
  shrubs, shoots, fire ecology, Spain 9775
  simulation, *Pinus taeda* 3331
  Taxodium distichum, flooding, hypoxia, plant composition 3606
  Thuja plicata, planting stock, Canada, measurement 1723
  Trema guineensis, seedlings, light 3010
  tropical forests, carbon dioxide, stable isotopes 2999
  vegetation types, biodiversity, Russia 7198
  winter, *Picea rubens,* genetic variation, USA 7196
Phratora purpurea, insect pests, *Populus grandidentata,* USA 2343
Phratora vitellinae
  insect pests
    Salix
      attractants, phenolic compounds 7472
      foliage, plant physiology 6492
Phrygilanthus sonorae, mistletoes, *Bursera,* Mexico, dispersal 2294
Phthirusa, mistletoes, seed dispersal, forests, Colombia 1469
Phylacteophaga froggatti
  insect pests
    Eucalyptus, provenance, Australia, resistance 4031
    Eucalyptus globulus, provenance trials, Australia 2554
Phylica arborea, natural regeneration, site factors, Tristan da Cunha 3837
Phylica nitida, deforestation, nature conservation, grazing, control, Indian Ocean Islands 9297
Phyllactinia dalbergiae, fungal diseases, *Dalbergia sissoo,* India 2281
Phyllanthus emblica
  degraded forests, stand structure, synecology, India 213
  forest nurseries, sowing depth, India 904
  forest plantations, increment, fruiting, India 1743
  medicinal plants, degraded forests, Sri Lanka 5851
  species trials, reclamation, mine spoil, India 2404
Phyllanthus reticulatus, vegetation types, climate, landscape, Kenya 2156
Phyllaphis fagi
  insect pests
    Fagus sylvatica
      plant nutrition
        Belgium, forest nurseries 8328
        Germany, defence mechanisms 5685
Phyllocladopitys petriellae, palaeobotany, Argentina 8142
Phyllocladus alpinus
  frost resistance, plant succession, New Zealand 281
  genetic variation, isoenzymes, frost resistance, New Zealand 562
Phyllocladus aspleniifolius, natural regeneration, stand structure, population ecology, Australia 3953
Phyllocladus trichomanoides, genetic variation, isoenzymes, frost resistance, New Zealand 562
Phyllocnistis meliacella, insect pests, *Swietenia mahagoni,* USA, chemical control 8351
Phyllocolpa, insect pests, *Salix,* galls, keys 2366
Phyllocolpa eleanorae, insect pests, *Salix sericea,* resistance 7429
Phyllocolpa nigrita, insect pests, *Salix sericea,* resistance 7429
Phyllonorycter, insect pests, *Quercus grisea* × *Quercus gambelii,* USA, parasites 5719
Phyllonorycter platani, insect pests, *Platanus,* UK, spread 7460

- ***Phyllonorycter robiniella,*** insect pests, *Robinia pseudoacacia,* Italy, biology, damage 2334
- ***Phyllonorycter salicifoliella,*** insect pests, *Salix sericea,* resistance 7429
- ***Phyllostachys***
  - genetic variation, taxonomy 5530
  - stems, mechanics 9797
- ***Phyllostachys bambusoides,*** bamboos, carbon cycle, biomass production, Japan, simulation 4530
- ***Phyllostachys edulis,*** bamboos, plant composition, pectins 9833
- ***Phyllostachys pubescens,*** wood chemistry, lignin 6450
- ***Phyllostylon,*** geographical distribution 1350
- **Phylogeny**
  - *Andira,* chloroplast genetics, taxonomy 6600
  - *Duguetia,* taxonomy 6521
  - Fabaceae
    - Caesalpinioideae, fruits, seeds, taxonomy 8977
    - flowers, development, plant morphology 8975
    - Mimosoideae, fruits, seeds, taxonomy 8977
    - plant anatomy 8904
    - wood anatomy, keys 8906
  - Hamamelidae, pollen, hydroxycinnamoyl spermidines 8234
  - Juglandaceae 3987
  - Lythraceae 3995
  - nitrogen fixing trees 2173
  - *Pinus ponderosa,* seeds, chemistry, molecular genetics 440
  - Saururaceae, wood anatomy 8073
  - Simaroubaceae 3997
  - *Ulmus,* molecular genetics, taxonomy 5541
- **Physiology** (*see* Photosynthesis; Plant physiology; Plant water relations)
- ***Physocarpus opulifolius,*** shoot cuttings, landscape, Canada 6041
- **Phytogeography**
  - boreal forests, peatlands, Latvia 8155
  - forest trees, water balance, simulation 7682
  - global warming, Italy, mediterranean climate 6256
  - islands, formation, *Myrica cerifera,* plant succession, USA 8172
  - subalpine forests, Guatemala, Costa Rica 6537
- ***Phytolyma lata,*** insect pests, *Milicia excelsa,* Ghana, resistance, phenotypic variation 10036
- **Phytopathology** (*see* Fungal diseases)
- ***Phytophthora***
  - fungal diseases
    - *Abies procera,* Christmas trees, USA 9097
    - *Castanea sativa,* tissue culture, resistance 6892
    - *Eucalyptus*
      - South Africa 8291
        - reviews 1452
    - *Pinus*
      - South Africa 8291
        - reviews 1452
    - *Quercus robur,* forest decline, Germany 8292
- ***Phytophthora cambivora,*** fungal diseases, *Alnus,* UK, distribution 3164
- ***Phytophthora cinnamomi***
  - fungal diseases
    - *Banksia attenuata*
      - Australia 9096
        - chemical control 8320
    - endangered species, forest management, Australia 7395
    - *Eucalyptus,* South Africa, reviews 1452
    - *Eucalyptus globulus*
      - enzymes 8272
      - plant physiology 3771
      - roots, enzymes 3772
    - *Pinus*
      - South Africa, reviews 1452
      - USA, damage 5057
- ***Phytophthora cinnamomi cont.***
  - fungal diseases *cont.*
    - sclerophyllous forests, natural regeneration, Australia 3954
- ***Phytophthora cryptogea***
  - fungal diseases
    - *Eucalyptus,* South Africa, reviews 1452
    - *Pinus,* South Africa, reviews 1452
- **Phytotoxicity**
  - *Acacia,* seed germination, fumigants, phostoxin 5781
  - aluminium, *Pinus sylvestris,* seedlings, biochemistry 7188
  - *Dalbergia sissoo,* seed germination, fumigants, phostoxin 5781
  - metal ions, *Pinus sylvestris,* seedlings, phenolic compounds, respiration 7189
  - *Pinus roxburghii,* seed germination, fumigants, phostoxin 5781
- ***Picconia excelsa,*** species trials, rehabilitation, Canary Islands 6032
- ***Picea***
  - biomass production, biogeochemistry, plant nutrition, cycling, Russia 7970
  - boreal forests
    - forest health, monitoring, Canada 9866
    - thinning, biomass production, Russia 9527
  - choice of species, afforestation, altitude, France 9421
  - forest decline, air pollution, ozone, reviews 7984
  - forest influences, throughfall, isotopes, USA 7124
  - forest litter, classification, Russia 7916
  - fungal diseases, *Gremmeniella abietina* 4169
  - insect pests
    - *Pissodes strobi*
      - Canada, integrated pest management 7497
      - North America
        - biological control 680
        - parasitoids 680
    - *Pristiphora abietina,* air pollution, Austria 7487
  - molecular genetics, ribosomal DNA 5498
  - mycorrhizas, plant nutrition, nitrogen 8273
  - natural regeneration
    - logging, Canada, microclimate 8623
    - stand characteristics, botanical composition, climatic change, Poland 7330
    - Temperate Zones 3840
  - palaeobotany, Russia 3890
  - seed germination, water stress 9426
  - silvicultural conversion, management, Poland 952
  - silvicultural systems, insects, species diversity, conservation, Norway 7418
  - soil chemistry, cation exchange capacity, Canada 5250
  - stand characteristics, remote sensing, simulation, USA 2754
  - stumpage value, Canada 9651
  - subalpine forests
    - USA
      - disturbed land
        - human activity 9940
        - recovery 9940
  - thinning, Canada, planning 4353
  - watersheds, acid deposition, interception, recovery, Sweden 6339
  - wildlife, fertilizers, paper mill sludge, USA 4069
  - wood anatomy
    - identification 495
    - palaeoecology, Japan 8990
    - parenchyma 4625
- ***Picea abies***
  - acid deposition
    - cycling, Denmark 8001
    - nitrogen
      - plant nutrition 3656
      - soil acidity 5336
    - plant nutrition, growth, Finland 7098
- ***Picea abies cont.***
  - acid deposition *cont.*
    - soil, acidification, plant composition, metals 4541
    - throughfall, chemistry, Bulgaria 7982
    - watersheds, hydrology, Finland, acidification 6333
  - advance growth
    - clear felling, nitrogen fertilizers, Russia 4294
    - growth models, height, Finland 6971
  - afforestation
    - agricultural land, soil morphology, forest influences, Denmark 5351
    - soil chemistry, Germany 9764
  - air pollution
    - acid deposition, Germany, measurement 6350
    - arsenic, Germany 8836
    - canopy, foliage, distribution, Czech Republic 7088
    - damage, assessment 6818
    - deposition
      - cycling, Germany 6332
      - Denmark, estimation 330
      - simulation, Germany 331
      - throughfall, precipitation, Western Europe 2866
    - foliage
      - Austria 9750
      - chemistry
        - Slovakia 9745
        - TCA, Finland 338
      - damage, Slovakia 9741
    - France, measurement 1160
    - Germany 2850
    - hydrogen peroxide, metabolic detoxification 6338
    - mercury, foliage, gas exchange 8852
    - nitrates, Germany 3649
    - nitrogen, soil fertility, yield forecasting, Sweden 7981
    - nutrient deficiencies, plant nutrition 5327
    - oxidants, peroxidases, Germany 3662
    - ozone
      - acid deposition, foliage 7988
      - carbon dioxide enrichment, chromosome aberrations 4836
      - detection, phytol 6348
      - drought, plant physiology 5325
      - frost resistance, biochemistry 2882
      - gas exchange 2885
      - nutrient deficiencies, nutrition physiology 5326
    - photosynthesis, Russia 6335
    - Russia, damage, simulation 7993
    - seed germination, chromosome aberrations, Slovenia 5335
    - soil chemistry
      - Denmark, ammonium nitrate 5244
      - nutrient deficiencies, Germany 9755
      - Sweden, nitrates, soil solution 5246
    - sulfates, Slovakia, seasonal variation 7087
    - sulfur dioxide
      - Europe 4565
      - foliage, Germany 5315
      - Germany 9864
        - uptake 7983
      - salt injury, Europe 3644
    - throughfall
      - soil chemistry
        - Czech Republic 2863
        - Germany, nitrogen 5241
        - Sweden, nitrates 5245
    - UK
      - foliage
        - microbial flora 4570
        - nutrients 4559
        - wettability 4563
      - fumigation equipment 4189
      - fungal diseases, resistance 4571
      - growth 4558
      - insect pests 4573
      - metabolism 4562
      - plant physiology 4561
      - research 4574

Picea abies *cont.*
- air pollution *cont.*
  - water stress, foliage, Germany 449
- artificial regeneration, direct sowing, tree guards, Italy 6114
- bark
  - edible species, cooking, palatability 1810
  - stemflow, France, pH, conductivity 3021
- birds, foraging, *Formica aquilonia*, effects, Sweden 5828
- boreal forests
  - forest management, forest ecology, Sweden 10029
  - palaeoecology, stand characteristics, Sweden 7259
- branches, Poland, oils, production 7171
- buds
  - phenology, climatic change, provenance trials, Finland 2009
  - plant growth regulators, gibberellins, metabolism, translocation 9846
- calcium fertilizers, soil biology, microorganisms, Finland 5109
- canopy
  - leaf area index, simulation 2512
  - precipitation, Belgium, leaching 4082
  - snow, evaporation, Sweden, measurement 2905
- carbon dioxide enrichment
  - air pollution, ozone, seedling growth 2874
  - gas exchange, enzymes 2082
  - plant physiology
    - enzymes, carbon, metabolism 459
    - France, drought 4473
  - temperature, seedling growth, photosynthesis, transpiration 2997
- cell culture, metabolites, enzymes 110, 867, 6885
- cell growth, ultrastructure, ethylene, peroxidases 8108
- chlorophyll, fluorescence, light, acclimatization 467
- chloroplasts, separation, methodology 5953
- choice of species, protection forests, avalanches, Germany 6869
- Christmas trees
  - Italy, forest economics, production, quality 3468
  - paclobutrazol, Italy 4371
  - plant growth regulators 2667
  - silviculture, Russia 965
- chromosome aberrations
  - air pollution 6584
  - site factors 6584
- clear felling
  - site preparation, artificial regeneration, Sweden 9541
  - whole tree logging
    - carbon cycle, simulation, Sweden 4535
    - soil water, chemistry, Sweden 3569
- clones, genotype mixtures, increment, height, Sweden 1422
- Coleoptera, Germany, dead wood 1472
- coniferous forests
  - air pollution, mercury, deposition, Sweden 8851
  - mercury, deposition, watersheds, Sweden 8853
  - nitrogen fertilizers
    - streams
      - Sweden
        - aquatic animals 9458
        - water quality 9458
  - seedlings, mycorrhizas, lime, Sweden 6616
  - Slovakia 3932
- crown
  - development, thinning, simulation 795
  - Poland, oils, production 7171
- cycling
  - fertilizers, France 8779
  - France 1137
  - sulfur, Germany 7965
- decay, roots, defoliation, Switzerland 469

Picea abies *cont.*
- defoliation
  - air pollution, vehicles, Sweden, aerial photography 1167
  - nutrient deficiencies, soil chemistry, Germany, phosphorus 1126
  - reviews 469
- dendrochronology, increment, France 3290
- dendroclimatology
  - defoliation, Italy, growth 4989
  - UK 7615
- denitrification, nitrogen cycle, Europe, measurement 3575
- diameter, Italy, variation 2685
- dormancy, buds, variation 8046
- drought
  - foliage, plant anatomy 6296
  - plant water relations, transpiration, photosynthesis, France 5279
  - soil, minerals, wood anatomy, Germany 2897
- embryo culture
  - culture media 6067
  - plant growth regulators 8926
- endophytes, *Phialocephala scopiformis*, Germany 9068
- enzymes 6486
  - induction, air pollution, ozone 3801
  - light 3769
  - roots, measurement 3007
- epiphytes, air pollution, indicator plants, Sweden 6334
- fertilizers
  - ammonium sulfate, cycling, Sweden 2614
  - forest economics, Austria 9465
  - forest litter, ground vegetation, Austria 4304
  - irrigation, plant nutrition, Sweden 4538
  - lime
    - boron fertilizers
      - mycorrhizas, Finland 3161
      - plant nutrition, humus, Finland 2616
    - mycorrhizas, *Cenococcum geophilum*, acid soils, Finland 3162
  - nitrogen cycle, water stress, methodology 7646
  - soil biology
    - Austria 136
    - Finland 5276
  - wood anatomy, lignification 5345
- flowering
  - induction, seed orchards, Germany 6511
  - plant growth regulators, gibberellins, temperature 3829
- flowers, plant growth regulators, gibberellins, metabolism, translocation 9846
- foliage
  - air pollution
    - Austria 4674
    - diffusion models 4565
    - volatile compounds
      - Germany, insecticide residues 6342
      - residues 5334
  - biochemistry
    - air pollution, nitric oxide 3660
    - enzymes 3016
  - chemistry
    - air pollution
      - indicator plants, Sweden 1152
      - ozone 3652
  - chlorophyll, fluorescence, frost injury 1280
  - colour, forest decline, fertilizers, France 2610
  - damage
    - air pollution
      - deposition, Finland 9746
      - fluorides, Norway 5331
  - enzymes, metabolic detoxification 4705
  - essential oils, ozone, Sweden 6446
  - foliar uptake, microbial flora, methodology 3323

Picea abies *cont.*
- foliage *cont.*
  - life tables, Sweden 8056
  - light, plant morphology, Estonia 7030
  - lignification, peroxidases 4679
  - nutrient deficiencies, manganese, plant physiology 3642
  - oleoresins, monoterpenes, genetic variation, Sweden 1421
  - optical properties 1254
  - pesticide residues, Finland 6455
  - plant growth regulators, air pollution, Germany, damage 2995
  - plant nutrition, air pollution, UK 6453
  - seasonal variation, plant growth regulators, IAA, Czech Republic 457
  - shedding, forest health, Germany, methodology 3319
  - stomata, distribution, photosynthesis 2948
  - Switzerland, waxes, environmental effects 5220
  - waxes
    - morphology
      - air pollution, indicator plants 8050
      - injuries, Austria 8050
    - stomata, dry deposition 8841
  - Western Europe
    - chemistry
      - alkali metals 5394
      - rare earth elements 2982
  - wettability, Germany, measurement 2953
- forest borders, air pollution, deposition, Netherlands 6345
- forest damage, diagnosis, biochemistry, Germany, reviews 6503
- forest decline
  - air pollution
    - nitrogen cycle, Germany 3823
    - photosynthesis, Germany 2090
  - foliage
    - antioxidants, Germany 4723
    - cuticle, permeability, Germany 2089
    - phenolic compounds, Germany 7208
  - forest inventories, Switzerland 4721
  - forest management, France 3822
  - genetic variation, Europe 6583
  - Germany 6505
    - statistical analysis 4198
  - increment, Austria, simulation 7202
  - mountain forests, air pollution, France 3814
  - nutrient deficiencies, fungal diseases, Austria 8117
  - photosynthesis, photoinhibition, metabolism, Germany 1291
  - plant nutrition, Germany, amino acids 3805
  - plant physiology, chromosome aberrations, Austria 4727
  - population dynamics, simulation, Austria 6825
  - remote sensing
    - stand characteristics, Sweden 1855
    - thematic mapper, damage, Czech Republic 7840
  - snow damage, Germany 9864
  - soil amendments, France, rhizosphere fungi 2228
  - soil chemistry
    - fertilizers, plant nutrition, France 4302
    - France, soil water 4488
  - soil parent materials, geology, France 8943
  - soil water, chemistry, salt injury, Denmark 1295
- forest fires
  - Finland, mortality 8032
  - natural regeneration, age of trees, Sweden, history 3064
- forest health, UK, forest decline 6501

Picea abies *cont.*
- forest influences
  - air, Germany, monoterpenes, diurnal variation 1186
  - forest economics, peatlands, carbon cycle, Norway 2784
  - nutrients, distribution, Sweden 7129
  - soil organic matter, France 3688
  - throughfall, USA 2903
- forest litter
  - decomposition
    - chemistry, fertilizers, Sweden 3580
    - nutrients, soil biology, Denmark 5256
    - phenolic compounds, France 5259
  - nutrients, soil properties, Denmark 7962
  - Sweden, chemical composition 4494
- forest management, Sweden, simulation 2513
- forest plantations
  - agricultural land, pulpwood production, wood properties, Sweden 8007
  - beating up, increment, plant morphology, Sweden 9529
  - birds, Belgium, ecology 4909
  - cleaning, France 6932
  - decay fungi, Italy, ecology, succession 6606
  - fertilizers
    - forest decline, France, growth 4303
    - soil types, Russia 5108
  - forest influences
    - soil properties
      - Europe 1185
      - France 1994
  - plant nutrition, Slovenia, seedling growth 5126
  - pollination, Canada 2105
  - sample plot technique, growth models 6210
  - silviculture, grazing, France 5876
  - soil chemistry, nutrients, Canada 5358
  - spacing, Russia 1778
  - volume determination, Slovenia, old fields 2683
- forestry practices, soil biology, Finland 5273
- frost injury, provenance trials, Sweden 7872
- frost resistance
  - acclimatization, photosynthesis 1886
  - lignification, provenance 7034
  - roots, Russia 279
- fruits, chemistry, esters 1253
- fungal diseases
  - *Armillaria*
    - Germany 1451
    - thinning, Sweden 5625
  - *Ascocoryne cylichnium,* fatty acids, sterols 2259
  - decay fungi, Switzerland 6628
  - forest nurseries, Finland 5619
  - *Graphium,* Norway, insect pests, disease vectors 10014
  - *Heterobasidion annosum*
    - cell culture
      - callus 8258
      - plant physiology 447
    - defence mechanisms 5629
    - Denmark, control 10005
    - Germany 4859
    - thinning, Sweden 5624-5625
    - UK, resistance 4571
  - *Nectria fuckeliana,* fatty acids, sterols 2259
  - *Neobulgaria premnophila,* fatty acids, sterols 2259
  - *Ophiostoma,* Norway, insect pests, disease vectors 10014
  - *Ophiostoma polonicum*
    - Norway
      - disease vectors, *Ips typographus* 10015
      - pruning
        - plant physiology 10015
        - resistance 10015

Picea abies *cont.*
- fungal diseases *cont.*
  - *Pyrenochaeta ligni-putridi,* Switzerland 5631
  - *Pythium dimorphum,* seedlings, plant physiology 9087
  - *Rhizosphaera kalkhoffii,* resistance 867, 6885
  - Sweden, statistics 10007
- fungi, Norway, relationships, layer structure 9990
- gas exchange, measurement, techniques, air pollution, France 7654
- gene expression, histones 8230
- gene flow, genetic variation 7360
- genetic transformation
  - cell suspensions 8231
  - gene expression 7356
  - pollen 7355
  - techniques 9034
  - tissue culture 5502
- genetic variation
  - alloenzymes, Latvia 7342
  - bark, Italy, terpenoids 2060
  - forest decline, air pollution, sampling, Italy 2191
  - hybrids, taxonomy 7361
  - isoenzymes, Latvia 7347
  - phenotypes, enzymes, phosphoenolpyruvate carboxylase, air pollution 9856
  - reviews, Germany 6582
- genetics
  - isoenzymes
    - natural layering, subalpine forests, Germany 558
    - nutrient deficiencies, Germany 1424
    - Poland 5483
- global warming, provenance trials, increment, Finland 2791
- grafting
  - seed orchards
    - flowering, clonal variation, Poland 841
    - mortality, clonal variation, Poland 841
- grafts, shoots, nutrients, flowering, Poland 1132
- ground vegetation
  - amelioration of forest sites, Germany 8166
  - biomass, Slovakia 9946
  - fertilizers, forest decline, Germany 9463
- growth models, climatic change, USA 8705
- growth rings, plant nutrition, cadmium, zinc 2955
- heartwood, increment, diameter, age of trees, Estonia 1183
- height, growth models, mountain forests, France 4204
- herbicide resistance, bilanafos, plant morphology, seedling growth 5137
- humus, soil biology, altitude, France 3588
- increment 1007
  - climate, Germany 7818
  - diameter
    - air pollution, Russia 4569
    - Finland 9584
    - Sweden, root and butt rots 8712
  - equations, height, Poland 6976
  - Germany 6982
  - height, growth models, Germany 6185
  - mixed forests, Germany 9343
  - plant nutrition, plant water relations, Denmark 7819
- injuries, Switzerland 2093
- insect pests
  - Aphididae, UK, roots, air pollution 4573
  - *Cephalcia*
    - Italy 9174
    - Poland, chemical control 7499
  - *Cephalcia arvensis*
    - Italy
      - biological control, by nematodes 5804

Picea abies *cont.*
- insect pests *cont.*
  - *Cephalcia arvensis cont.*
    - Italy *cont.*
      - damage 4043
      - population dynamics 6663
  - *Cephalcia fallenii,* Poland 7488
  - *Cinara costata,* Sweden, water stress, pest resistance 10032
  - *Cinara pilicornis,* air pollution, ozone, Switzerland 5693
  - Coleoptera
    - Germany 2355
    - snow damage, Sweden, susceptibility 10045
  - cones
    - Norway 7431
    - Poland, parasitoids 2304
    - Switzerland 8327
  - *Dendroctonus micans*
    - biological control, France, *Rhizophagus grandis* 9185
    - France 652
      - biology, population dynamics 4890
  - *Gilpinia hercyniae,* Sweden, water stress, pest resistance 10032
  - *Hylobius abietis*
    - feeding behaviour 5759
    - shelterwood system, Sweden 4041
    - Sweden, control 10054
  - *Ips*
    - interspecific competition 5739
    - pheromones 2348
  - *Ips typographus*
    - Austria 7471
      - pheromone traps 9196
      - plant composition 2354
    - Germany, control 3191
    - Norway
      - disease vectors 10014
        - *Ophiostoma polonicum* 10015
    - Slovenia, control 3190
  - *Monochamus sutor,* plant parasitic nematodes 1495
  - *Pissodes strobi,* Canada 5750
  - *Pityogenes chalcographus*
    - Austria, plant composition 2354
    - Germany, biological control 9171
  - *Pristiphora abietina*
    - Austria
      - integrated control 9176
      - predators 9176
    - Germany 10057
  - Romania, control 9188
  - Scolytidae
    - Austria, terpenoids 2357
    - Germany 10057
- irrigation, increment, Denmark 6930
- isoenzymes
  - gene mapping
    - Belarus 9044
    - Latvia 9044
    - Russia 9044
    - Ukraine 9044
- juvenile wood, wood anatomy, variation 2898
- leaf area index, Austria, measurement, equipment 7652
- lichens, air pollution, aluminium, Finland 8843
- light, diameter, Italy, growth effects 6362
- lime
  - irrigation, mycorrhizas, enzymes 9993
  - soil biology, Germany 7760
- liming, roots, soil chemistry, Sweden 9460
- logging effects, logs, fungi, Sweden 7254
- magnesium fertilizers, cycling, Germany 7761
- microwave radiation, seedlings 329
- mixed forests
  - increment, recruitment, mortality, Poland 2163
  - natural regeneration, synecology, Poland 8179
  - soil chemistry, seasonal variation, Austria 7886
  - synecology, plant succession, Poland 2164

Picea abies *cont.*

- mixtures
  - forest plantations, Ukraine 1783
  - increment, Finland, simulation 3462
  - *Larix sibirica,* root systems, plant competition, Russia 2656
  - mountain forests, Germany 948
  - stand establishment, cover crops, fertilizers, Germany 6923
- molecular genetics 5507, 8195
  - flowering 5504
  - nucleotide sequences 9046
  - random amplified polymorphic DNA 2199
  - ribosomal DNA 5498
- mountain forests, genetic variation, Europe 6583
- mycorrhizas
  - air pollution, Sweden 5580
  - *Amanita muscaria*
    - cell culture, plant physiology 447
    - induction, cell culture, callus 8258
    - seedlings, enzymes 7393
  - Belgium, seasonal variation 1445
  - *Cenococcum geophilum*
    - enzymes 9993
    - protoplasts 9073
    - seedlings, enzymes 7393
  - chemistry 8274
  - *Elaphomyces,* enzymes 9993
  - Germany 3158
  - *Hebeloma crustuliniforme*
    - cell culture, plant physiology 447
    - induction, cell culture, callus 8258
    - plant nutrition 5569
  - *Hydnum,* identification, methodology 9081
  - *Laccaria laccata,* seedlings, photosynthesis, seasonal variation 2249
  - *Lactarius,* host specificity 5572
  - *Lactarius deterrimus,* induction, cell culture, callus 8258
  - *Lactarius lignyotus* 5614
  - *Lactarius piperatus,* seedlings, photosynthesis, seasonal variation 2249
  - *Morchella esculenta* 597
  - nitrogen fertilizers, soil water regimes, Sweden 8260
  - *Paxillus involutus,* soil pH, nutrition physiology 5583
  - *Piceirhiza nigra,* enzymes 9993
  - *Pisolithus tinctorius,* seedlings, photosynthesis, seasonal variation 2249
  - *Russula ochroleuca,* enzymes 9993
  - soil fungi, ultrastructure 9082
  - *Suillus variegatus,* induction, cell culture, callus 8258
  - *Tylospora,* enzymes 9993
- natural regeneration
  - allelopathy
    - France, understorey 2162
    - mycorrhizas, humus 5270
  - clear felling, Sweden 3439
  - France, reviews 3437
  - plant succession, Russia 1400
  - shelterwood system, Sweden 9488
  - site preparation, soil amendments, France 9492
  - stand structure, botanical composition, development, Poland 7329
  - statistical analysis, Germany, spatial distribution 7774
- natural thinning, Finland, mathematical models 9959
- nitrogen cycle
  - fertilizers, Finland 7953
  - soil chemistry, ground vegetation, Sweden, methodology 1145
- nitrogen fertilizers
  - understorey, Sweden 2611
  - water stress, nutrient uptake, photosynthesis 7945
- nitrogen-phosphorus fertilizers, soil biology, microorganisms, Finland 5109
- NPK fertilizers
  - increment, Denmark 7755
  - irrigation, increment, Denmark 911
- nurse trees, UK, *Quercus robur* 5155

Picea abies *cont.*

- nutrient allocation, carbon, nitrogen, phosphorus 2072
- nutrient balance, fertilizers, irrigation, Sweden 7966
- nutrient deficiencies
  - Germany 6314
  - magnesium
    - amelioration of forest sites, Austria 7754
    - fertilizers, lime, acid soils, France 2856
    - foliage, pigments 4536
    - reviews 9732
    - soil chemistry, Germany 7057
  - magnesium fertilizers
    - foliage, Germany 132
    - soil chemistry, Germany 132
  - nitrogen, Germany 1126
  - plant physiology, air pollution 5299
  - simulation, growth, nutrient allocation 7077
  - soil chemistry, USA 2848
- nutrient uptake, soil chemistry, methodology 7647
- old fields, stand development, soil chemistry, Norway 7890
- Oligochaeta, fertilizers, lime, acid deposition, humus 1105
- ozone
  - enzyme activity, nutrient uptake 4708
  - plant physiology
    - Austria 7099
    - proteins 2868
  - seedlings, Switzerland 5311
- palaeoecology
  - pollen analysis, Sweden 3068
  - vegetation, history, dendrochronology, Sweden 7613
- phenology, climatic change, Europe 4618
- photosynthesis
  - acid deposition, plant growth regulators, benzyladenine 462
  - air pollution, foliage, shedding, simulation 5405
  - carbon dioxide enrichment, foliage, pH 2084
  - chlorophyll 3788
  - foliage, shedding, air pollution, Czech Republic 2878
  - light, temperature 3796
  - nutrient deficiencies, magnesium 8097
  - photoinhibition
    - light
      - frost injury 5408
      - temperature, Germany 1292
    - stress, measurement 7197
  - photosystem II, biochemistry 3008
  - pigments, plant nutrition 2079
- photosystem ii, Sweden, spring, recovery 6496
- plant colonization, grasslands, Italy 6566
- plant competition, nature reserves, Germany 9956
- plant development, maturation, cell membranes, composition, lipids 3759
- plant growth regulators, gibberellins, flowering 3777
- plant morphology
  - habit, taxonomy, Poland 1322
  - Romania, crown, phenotypic variation 9031
- plant nutrition
  - calcium 2858
  - foliage, age, Western Europe 7958
  - forest decline, Germany, magnesium 1127
  - nitrogen 8816
    - seedling growth, mathematics 7078
  - plant water relations, Denmark, methodology 7650
- plant parasitic nematodes, *Bursaphelenchus mucronatus,* vectors 1495
- plant succession
  - climatic change, Europe 8171
  - forest fires, Slovenia 5459
  - nature reserves, Germany 9954

Picea abies *cont.*

- plant water relations
  - Italy 3615
  - Sweden 2831
- plantations, synecology, Germany 9004
- planting stock, storage, temperature, frost resistance 6087
- pollen
  - development
    - Finland, forecasting, heat sums 9872
    - Russia, heat sums 5422
  - morphology, Russia 8059
- pollen analysis, vegetation, history, Austria 7261
- pollination, fertilization, Sweden 2107
- progeny testing
  - frost resistance, Norway 8210
  - Slovenia 5476
- protection forests
  - forest decline, fertilizers, Switzerland 7753
  - silviculture, France, mountain forests 5840
  - stand structure, France, natural disasters 10090
- provenance
  - frost resistance
    - foliage
      - air pollution
        - reviews 9679
        - UK 9679
- provenance trials
  - climatic change, adaptation, temperature, simulation 1660
  - diameter, increment, drought, Poland 830
  - hybrids, genetic variation, increment, Sweden 824
  - increment, frost injury, Norway 9413
  - Korea Republic 6871
  - plant competition, Sweden 2178
  - Poland, age, site factors 829
  - progeny testing, artificial selection, Poland 2179
  - Russia 1658
  - statistical analysis, Germany 8559
- reclamation, stony soils, mountain areas, Poland 3440
- remote sensing
  - diameter, Norway 9629
  - Sweden, solar radiation 1859
- reproductive behaviour
  - crown, forest decline, UK 3033
  - seed orchards, root pruning, plant growth regulators, Sweden 3828
- research, Europe 8492
- root systems
  - drought, fertilizers, Sweden 8047
  - fertilizers, soil chemistry, rhizosphere, Sweden 7749
- roots
  - air pollution, Sweden, soil, distribution 5319
  - biomass, air pollution, Slovakia 7151
  - decomposition, nitrogen cycle, Estonia 7893
  - dendrochronology, Germany 6760
  - development, morphology, genetic engineering, *Agrobacterium rhizogenes* 3133
  - enzymes, plasma membranes, aluminium, toxicity 6478
  - hydraulic conductivity, measurement 7072
  - methodology 9344
  - nutrient deficiencies, cytokinins, metabolism 4698
  - nutrient uptake
    - fertilizers, Sweden 9788
    - irrigation, Sweden 9788
  - plant water relations 5285
  - stumps, decay fungi, Sweden 9989
  - systems, site types, Russia 8060
  - testing, Sweden, tetrazolium compounds 1885
  - vigour, fertilizers, Sweden 7750
- salt spray, soil toxicity, Denmark 8000
- sap, nutrient content, cycling, methodology 7648

Picea abies cont.
  sapwood, increment, diameter, age of trees, Estonia 1183
  seed collection, economics, Russia 854
  seed dispersal, wind, seed germination 479
  seed germination
    inhibitors 446
    temperature 9427
  seed morphology, testas, imbibition 8896
  seed orchards
    genetic variation, pollination, Sweden 9969
    reproductive behaviour, climatic factors, cold resistance, Norway 9878
  seed set, abortion, seed production 3378
  seedling growth
    phenology, genetic variation, photoperiodism, temperature 8040
    plant growth regulators 463, 1268
  seedlings
    acid deposition, simulation, growth, damage 8834
    air pollution
      sulfur dioxide
        foliage, physiology 8107
        nitrogen, metabolism 7995
    allelopathy, France 3105
    buds, dormancy breaking, temperature 1262
    cold injury, Sweden, damage 9675
    cytokinins, metabolites 3797
    foliage, acid deposition, damage 8839
    frost injury, light, methodology 3315
    ozone, messenger RNA, induction 8185
    photosynthesis, light, enzymes 458
    plant nutrition
      provenance trials, genetic variation, Poland 1131
      soil toxicity, aluminium, calcium 1125
    roots
      acid deposition, damage 8839
      soil toxicity, soil pH, aluminium 7920
    subalpine forests, natural regeneration, mosses, Switzerland 6555
  seeds
    enzymes, properties 6481
    mechanical properties, testing 405
    taxonomy, analysis, proteins 1320
  selection system
    increment, stand development, Norway 9489
    stand structure, Sweden 9485
  shelterwood system
    natural regeneration
      artificial regeneration, Sweden 9541
      microclimate, Sweden, monitoring, equipment 9333
  shoot cuttings
    cold injury, Sweden, damage 9675
    increment, habit, Finland 866
    mycorrhizas, *Laccaria laccata*, France, inoculation methods 4008
  shoots
    defoliation, forest decline, Germany 9865
    Germany, emission, hydrogen sulfide 8099
    growth, plant growth regulators, auxins, inhibitors 8925
    morphology 2934
    structure, photosynthesis, light, carbon dioxide 8109
  silvicultural conversion
    Germany 6132, 9493
    mixtures, Austria 6940
  silvicultural systems
    forest economics, Austria, simulation 6915
    selection forests, Germany 918
    selection system, stand characteristics, Germany 6132
    shelterwood system, wind damage, Sweden 3559

Picea abies cont.
  silvicultural systems *cont.*
    understorey, species diversity, Sweden 9484
  silviculture
    genotypes, wood properties, reviews 8008
    Germany, conferences 5940
  site class assessment
    Slovakia 6979
    Slovenia 5175
    soil chemistry, topography, Sweden 2708
    soil properties, Russia 5186
  site preparation
    Russia 1751
    slash, cycling, Sweden 3445
  site types, vegetation types, Germany 4769
  snow, evaporation, Germany 4933
  soil amendments
    dolomite, soil chemistry, Germany, soil solution 3412
    roots, Sweden 3419
  soil biology, soil amendments, wood ash, soil chemistry, Sweden 893
  soil chemistry
    acidification
      clay minerals, Sweden 291
      seasonal variation, Germany, simulation 7978
    nitrates, indicator plants, Sweden, seasonal variation 24
    nitrogen, Scandinavia 7888
    nutrients, availability 8872
    rhizosphere, roots, distribution, Sweden 9684
    weathering, UK 1904
  soil fertility, silvicultural systems, France 9711
  soil organic matter
    decomposition, soil water, fertilizers, Denmark 3581
    sorption, halogens, Sweden 8777
  soil pH
    research, Germany 9697
    Sweden, calcium, aluminium 3572
  soil physics, Russia 8772
  soil pollution, growth rings, heavy metals 6457
  soil properties, climate, Sweden 9683
  soil toxicity, aluminium, plant nutrition, seedlings 7969
  soil types, soil properties, Denmark 1085
  soil water potential, diameter, Germany 9687
  somatic embryogenesis 5072
    growth, plant growth regulators, ethylene 2585
    micropropagation 7744
      culture media 8578
  spacing
    increment, Sweden 3457
    wood density, Sweden 9757
  stand characteristics, plant competition, yield tables, simulation 6827
  stand density
    basal area, Romania, allometry 8662
    Germany 2687
  stand development
    forest management, sustainability, Finland, simulation 9577
    thinning, strip roads, Sweden 6983
  stand structure, simulation, Belgium 4359
  stem form, taper, volume, Denmark, equations 991
  stems
    growth models, France, morphology 5018
    monoterpenes, insect pests, attractants, Austria 2354
    Sweden, damage, cracks 4637
  synecology, species diversity, Sweden, simulation 5965
  taxonomy, plant morphology, habit, Poland 2114
  thinning
    Germany 9526
    pruning, Germany 9525
    selection criteria, Russia 2652
    stand characteristics, Sweden 9520

Picea abies cont.
  throughfall
    air pollution, precipitation, Switzerland, trace elements 4552
    deposition, chemistry, Sweden 1532
  tissue culture
    callus
      Heterobasidion annosum 8258
      light
        cytoplasmic inclusions
          chloroplasts 395
          tannins 395
      mycorrhizal fungi 8258
    embryo culture, culture media 873
    explants 5086
    genetic variation 1697
    grafting 125
    parthenogenesis 4279
    somatic embryogenesis 3398, 6888
      size, glycoproteins, development 6049
  transpiration, sap flow, Sweden 7061
  tree breeding
    early selection
      phenology, increment 3132
      plant physiology, increment 1423
    progeny testing
      frost resistance, phenology, Norway 568
      genetic variation, heritability, Finland 9972
  treelines
    Russia, distribution 7263
    Scandinavia, distribution 7263
  ungulates, forest management, national parks, Poland 4058
  valuation, Germany 9656
  vegetation types, site factors 3912
  volume determination
    equations 9578
    remote sensing 1034
  volume tables, Norway 5170
  water stress
    ozone 3617
    planting stock, site preparation, Sweden 9681
  water uptake, Sweden, tracers 8814
  waterlogging, foliage, plant anatomy 6296
  watersheds, hydrology, UK, research 702
  waxes, leaf age, forest decline, Europe 6443
  wildlife
    birds, Slovakia 10078
    forest borders, clear felling, Sweden 5810
  wind damage, Netherlands 1062
  wood anatomy, rays, grain and figure 389
  wood chemistry, sugars 4668
  wood defects, spiral grain, Denmark 3683
  wood properties, growth models, site factors, quality 8863
  yield forecasting, remote sensing, simulation, Estonia 1866
  yield tables, site class assessment, air pollution, Germany 9602
Picea chihuahuana, taxonomy, plant morphology, plant composition, Mexico 501
Picea engelmannii
  artificial regeneration, site preparation, planting, Canada 9508
  dendroclimatology, increment, climate, USA 4990
  forest economics
    nature conservation, simulation, USA 1870
    silvicultural systems, simulation, USA 1870
  forest nurseries, container grown plants, Canada, seedling growth 139
  forest plantations, plant competition, USA, survival 6922
  genetic variation, USA 2184
  insect pests, *Dendroctonus punctatus*, North America, biology 8343
  light, interception, plant morphology, USA 3733

***Picea engelmannii** cont.*
  nitrogen cycle, water pollution, simulation, USA 3625
  plant nutrition, iron, waterlogging, USA 3638
  planting stock
    logging effects, Canada, plant competition, growth 4580
    plant water relations, Canada, damage 905
    seedling growth, Canada, damage 905
  population dynamics, increment, USA, equations 9962
  seed dispersal, wind, seed germination 479
  seed orchards, pollination, Canada, methodology 9873
  seedlings
    storage, thawing, plant physiology, recovery 6080
    water stress, photosynthesis, light 7062
  site class assessment, equations, USA 233
  squirrels, *Tamiasciurus hudsonicus,* USA, ecology 3207
  stand development, Canada, methodology 2169
  subalpine forests
    dendrochronology, USA 3291
    dendroclimatology, USA 4470
  taxonomy
    plant morphology
      plant composition
        Mexico 501
        USA 501
  virgin forests, remote sensing, USA 1865
  wildlife, *Thomomys talpoides,* USA, damage 6922
Picea excelsa *(see Picea abies)*
Picea glauca
  afforestation, trials, international cooperation, Russia 9502
  air pollution, mercury, deposition, Canada 8854
  artificial regeneration, site preparation, planting, Canada 9508
  boreal forests
    artificial regeneration, seedlings, Canada 9503
    plant succession, forest fires, Canada 9949
    stand characteristics, biomass production, Canada, simulation 9596
  browsing damage, repellents, Canada, selenium 4905
  carbon dioxide enrichment, air pollution, ozone, seedling growth 2874
  cones, decay, resistance 604
  embryos, development, scanning electron microscopy 1228
  fertilizers
    foliage
      chemistry, Canada 887
      weight, Canada 887
    mulching, seedling growth, Canada 6116
  foliage, amino acids, temperature, photoperiod, seasonal variation 9842
  forest fires, treelines, global warming, Canada 3700
  forest litter, decomposition, soil chemistry, USA 7903
  forest nurseries
    container grown plants
      Canada, seedling growth 139
      growing media, *Sphagnum,* Canada 6082
    fertilizers, Canada, interactions 2619
    nitrogen fertilizers, nutrient deficiencies, phosphorus 5111
    seedling growth, Canada, container grown plants 8595
  forest plantations
    fertilizers, weed control, Canada 1749
    site class assessment, Canada 8703
    spacing, crown, Canada, growth 4331
  frost resistance, provenance trials, Canada 1084
  gene expression, somatic embryogenesis 7357

***Picea glauca** cont.*
  genetic transformation, pollen, embryos, techniques 2196
  genetic variation
    isoenzymes, North America 9977
    wood properties, Canada 559
  gibberellins
    flowering, effects 9871
    sex expression, effects 9871
  growth models, height, stand characteristics, Canada 1838
  height, growth models, site class assessment, Canada 4417
  herbicide resistance
    bilanafos
      photosynthesis, plant nutrition 5138
      plant morphology, seedling growth 5137
  improvement fellings, *Populus,* Canada, growth 175
  increment
    canopy, light penetration, Canada 1757
    wind damage, dendrochronology, Canada 3484
  insect pests
    Choristoneura fumiferana, Canada 639
    Dendroctonus punctatus, North America, biology 8343
    Lepidoptera, Canada, chemical control 9187
    Pissodes strobi, Canada 5750
    Sacchiphantes abietis, Canada 7442
    Zeiraphera canadensis
      Canada 5722, 7448
        ecology 5694
        resistance 2319
        reviews 3180
      phenology, Canada 647
  insecticides
    carbaryl, degradation 9194
    metabolites, persistence, Canada 9187
    tebufenozide, persistence, Canada 9198
  mixtures, site class assessment, yield forecasting, Canada 5177
  nitrogen fertilizers, weed control, irrigation, Canada 4337
  plant nutrition
    nitrogen
      ammonium, roots 9729
      nitrate, roots 9727-9728
      seedling growth, mathematics 7078
      USA 9721
    soil fertility, forestry practices, Canada 7793
  planting stock
    bare rooted stock, lifting, plant composition 1722
    cold storage, water stress, plant physiology, effects 6903
    plant water relations, Canada, damage 905
    quality, cytology, methodology 5005
    seedling growth, Canada, damage 905
  pollen
    development, Russia, heat sums 5422
    morphology, Russia 8059
  remote sensing, radar, USA, seasonal variation 2755
  seed collection, harvesting date, seedling growth, Canada 80
  seed germination, seed treatment 3387
  seed orchards
    pollination
      Canada, methodology 9873
      population genetics, Canada 564
  seedlings
    storage, thawing, plant physiology, recovery 6080
    temperature, planting stock, storage, Canada 6079
    water stress, photosynthesis, light 7062
  shoots, cones, plant morphology, Canada 9787
  silviculture, plant nutrition, translocation, Canada 6324

***Picea glauca** cont.*
  site class assessment, soil properties, ground vegetation, plant composition, Canada 8704
  snow damage, USA 4483
  somatic embryogenesis
    ethylene 5078
    genetic variance, cryopreservation 5079
  spacing, increment, Canada, juvenile wood 2899
  temperature, carbon dioxide enrichment, plant physiology, simulation, measurement 1609
  tissue culture
    somatic embryogenesis
      artificial seeds 119
      biochemistry 3394
      culture media, storage, desiccation 7740
      plant growth regulators, abscisic acid 6048
  weed control, USA 8645
  wood anatomy, Canada, environmental factors 3684
  yield forecasting, site factors, Canada, plant height 3489
Picea glauca × Picea engelmannii
  fertilizers
    foliage
      chemistry, Canada 887
      weight, Canada 887
  planting stock
    seedlings
      frost resistance, increment, morphology 1726
      physiology, Canada 1728
      quality 1727
    somatic embryogenesis
      frost resistance, morphology 1726
      physiology, Canada 1728
    tissue culture, somatic embryogenesis, quality 1727
  seedling growth, bacteria, Canada 7926
  seedlings, acclimatization, plant composition, proteins 3565
Picea glauca × Picea sitchensis
  fertilizers
    foliage
      chemistry, Canada 887
      weight, Canada 887
  planting stock, quality, cytology, methodology 5005
Picea glehnii
  serpentine soils, nutrient uptake, nutrient deficiencies, Japan 7046
  stand structure, natural regeneration, Japan 2168
  vegetation types, Russia 4779
Picea jezoensis
  afforestation, trials, international cooperation, Russia 9502
  cuticle, bark, triterpenoids, chemotaxonomy, Japan 8083
  forest decline, Russia 8941
  insect pests
    Adelges japonicus, Japan, galls 5689
    Cephalcia isshikii, Japan, damage, biology 4894
    Ips typographus
      Japan, trapping, aggregation pheromones 4900
      logging, Japan, spread 7463
  soil toxicity, boron, tolerance 7921
  stand structure, canopy gaps, understorey, Japan, growth 8659
  wood anatomy, wood properties 7153
Picea lutzii
  insect pests
    Dendroctonus rufipennis
      USA
        resistance 1491
        simulation 1491
Picea mariana
  advance growth, height, yield forecasting, Canada 9491
  air pollution, photosynthesis, simulation, Canada 1973
  bark, lichens, air pollution, mercury, Canada 8832

Picea mariana *cont.*
- boreal forests
  - ecotones, natural regeneration, Canada, simulation 799
  - oil spills, USA, recovery 1980
  - plant succession, forest fires, Canada 9949
- carbon cycle, Canada 4490
- chromosomes, morphology, karyotypes 2189
- cones, gibberellins, root pruning, production 9847
- coniferous forests, light penetration, Canada 1060
- container grown plants, gas exchange, photosynthesis, water stress 4519
- control, woody weeds, *Rubus idaeus,* Canada 6931
- degraded forests, natural regeneration, remote sensing, Canada 7838
- direct sowing
  - seedbeds
    - Canada 4332, 6925
    - site factors, Canada 4330
  - soil compaction, Canada 2634
- drought resistance, winter, USA 1931
- early selection, climatic change, Canada 3978
- embryo culture, genetic engineering, enzymes, β-glucuronidase 3975
- foliage, lichens, air pollution, mercury, Canada 8832
- forest fires, treelines, global warming, Canada 3700
- forest nurseries
  - container grown plants
    - frost resistance 2803
    - growing media, *Sphagnum,* Canada 6082
  - growing media, water stress, Canada 6083
  - seedling growth, Canada, container grown plants 8595
- forest plantations
  - plant competition, woody weeds, Canada, growth 4407
  - site class assessment, Canada 8703
  - spacing, crown, Canada, growth 4331
  - volume determination, equations, nondestructive testing 6161
- frost resistance 5234
  - measurement, methodology 786
- fungal diseases
  - *Botrytis cinerea*
    - biological control, microorganisms 2256
    - seedlings, infection, microclimate 1449
    - stress, disease resistance, control 1450
- gas exchange
  - carbon pathways, genetic variation, increment, Canada 9041
  - genetic variation, genotype environment interaction, Canada 9851
- genetic transformation, biolistics 6591
- genetic variation
  - increment, height, Canada 6589
  - seedling growth, phenology, Canada 3980
- growth rings, air pollution, mercury, Canada 9737
- height, growth models, site class assessment, Canada 4417
- herbicide resistance, bilanafos, plant morphology, seedling growth 5137
- increment
  - Canada, Arctic regions 1827
  - NPK fertilizers, spacing, Canada 1714
  - stem form, treelines, Canada 2688
- insect pests
  - *Choristoneura fumiferana*
    - Canada, biological control 676
    - natural regeneration, USA 1487
- molecular genetics, random amplified polymorphic DNA 9045
- natural regeneration
  - density, Canada, sampling 2500
  - forest fires, Canada 8882
  - seedbeds, Canada 6925

Picea mariana *cont.*
- nitrogen fertilizers
  - peat soils
    - Canada
      - distribution 3411
      - uptake 3410
- oil spills, damage, permafrost, USA 5342
- peatlands, palaeoecology, Canada 8149
- plant nutrition
  - nitrogen
    - seedling growth, mathematics 7078
    - USA 9721
  - North America, reviews 4615
  - NPK fertilizers, spacing, Canada 1714
- plant physiology, North America, reviews 4615
- planting stock, heat stress, plant composition, ethanol, measurement 9338
- protein synthesis, heat shock proteins, heat tolerance, diurnal variation 9850
- provenance
  - plant physiology, Canada 8931
  - plant water relations, seasonal variation, Canada 1110
- provenance trials, seedling growth, phenology 3374
- remote sensing, radar, USA, seasonal variation 2755
- seed collection, harvesting date, seedling growth, Canada 80
- seed cones, Canada, equations 9347
- seed germination
  - roots, hypocotyls 9434
  - seed treatment 3387
- seed orchards, pollen, seasonal variation, Canada 5423
- seedling growth
  - climatic change, plant nutrition, nitrogen, genetic variation 9666
  - plant competition, light, Canada 3880
- seedlings
  - drought resistance 3608
    - photosynthesis, plant physiology 5230
  - forest nurseries, stems, deformation, Canada 1729
  - water stress
    - abscisic acid, plant physiology 3018
    - turgor 2845
- shoots
  - cones, plant morphology, Canada 9787
  - structure, photosynthesis, light, carbon dioxide 8109
- silvicultural systems, natural regeneration, Canada 8621
- site class assessment
  - Canada 1008
  - height, Canada, equations 1616
- somatic embryogenesis 7746
  - Canada, techniques 4275
- spacing, increment, Canada, juvenile wood 2899
- spiral grain, variation 6417
- stand density, site class assessment, Canada, methodology 4399
- thinning, Canada, planning 4353
- tree breeding
  - drought resistance, biomass, Canada 5477
  - early selection, increment, Canada 9042
- treelines
  - climatic change, Canada, history 2127
  - vegetation, history, Canada 514
- volume tables, Canada 215
- weed control
  - cleaning
    - USA 2650
      - growth 2651
  - light, Canada, measurement 2486
  - *Rubus idaeus,* Canada 8633-8634
- wood density, Canada, variation, methodology 2896
- wood properties, increment, spacing, Canada 1182

Picea martinezii, taxonomy, plant morphology, plant composition, Mexico 501

Picea nakauchii, palaeobotany, Japan, foliage, anatomy 5441

Picea obovata
- boreal forests, natural regeneration, Russia, simulation, management 9965
- genetic variation, hybrids, taxonomy 7361
- increment, diameter, climate, Russia 9592
- reclamation, Russia 3228
- wood properties, growth effects, Russia 9756

Picea omorika
- bud culture, somatic embryogenesis, benzyladenine 88
- fungal diseases, *Mycosphaerella pini,* Serbia 5653
- insect pests, *Pissodes strobi,* Canada, damage 651
- seeds, taxonomy, analysis, proteins 1320
- tissue culture, culture media, micropropagation 8582

Picea orientalis
- insect pests, *Dreyfusia nordmannianae,* Europe, biology 634
- seeds, taxonomy, analysis, proteins 1320

Picea pungens
- air pollution, sulfur dioxide, foliage, Germany 5315
- dendrochronology, soil pollution, manganese, Canada 3680
- foliage
  - carotenoids, seasonal variation, photosynthesis, USA 6477
  - crystals 6404
- forest nurseries, nutrient deficiencies, Germany, potassium 1147
- fungal diseases
  - *Cytospora,* USA 4866
  - *Phomopsis occulta,* USA 8298
- genetic variation, USA 2184
- insect pests, *Choristoneura occidentalis,* dendrochronology, USA 6765
- pollen
  - development, Russia, heat sums 5422
  - morphology, Russia 8059
- pollen germination, biochemistry 4647
- population dynamics, increment, USA, equations 9962
- seeds, taxonomy, analysis, proteins 1320
- shoots
  - abnormal development, plant growth regulators 4716
  - Germany, emission, hydrogen sulfide 8099
- silvicultural characters, stand characteristics, Romania 8663
- taxonomy, plant morphology, plant composition, USA 501

Picea rubens
- acid deposition
  - foliage, damage, USA 5313
  - ozone, USA, interactions 3667
  - soil chemistry, acidification, simulation 345
  - watersheds, USA, pH 352
- air pollution
  - nitrogen, USA 6356
  - ozone
    - acid deposition, cycling 6347
    - frost resistance, USA 2864
  - photosynthesis, simulation, Canada 1973
  - radionuclides, canopy, interception, pot experimentation 8844
  - sulfur dioxide, photosynthesis 1979
  - throughfall, USA 2870
- biogeochemistry, USA, aluminium 8827
- biomass, equations, allometry, USA 4195
- clear felling, watersheds, USA, pH 352
- clouds, acid deposition, stand structure, USA 6261
- coniferous forests
  - forest litter, decomposition, USA 299
  - soil, acidification, USA 1170
- foliage
  - air pollution, sulfur dioxide, Canada 8856
  - cold injury, USA, damage 7036

Picea rubens *cont.*
- foliage *cont.*
  - optical properties, remote sensing 1256
  - ozone, plant composition, carbohydrates, nitrogen 6464
- forest decline
  - acid deposition
    - soil chemistry
      - plant nutrition, aluminium 1141
      - USA 1169
  - dendrochronology, statistical analysis, USA 5915
- frost injury
  - increment, USA 9677
  - solar radiation, aspect, USA 8763
- frost resistance, acid deposition 3024
- genetics, North America 6586
- geographical distribution, altitude, USA 2138
- heat tolerance, plant physiology, USA, geographical distribution 4478
- increment, height, liming, USA 3879
- injuries, defence mechanisms, USA, geographical variation 8110
- insect pests, *Choristoneura fumiferana,* natural regeneration, USA 1487
- lignification, enzyme activity 1275
- mistletoes, *Arceuthobium pusillum,* USA, distribution 616
- molecular genetics, random amplified polymorphic DNA 9045
- nutrient allocation, ozone, simulation 1977
- nutrient deficiencies, USA 3639
- ozone
  - nutrient allocation, stress factors, interactions 1975
  - nutrient deficiencies, simulation, interactions 1976
- photosynthesis
  - seedling growth, carbon dioxide enrichment, plant water relations, soil fertility 1293
  - winter, genetic variation, USA 7196
- plant nutrition, aluminium, toxicity, gas exchange, seedling growth 8819
- plant water relations, dielectric properties 785
- remote sensing, reflectance, USA 1046
- seedlings, plant competition, altitude, USA 1895
- shoots
  - cones, plant morphology, Canada 9787
  - optical properties 1059
- soil chemistry, nitrogen, foliage, chemistry, USA 3576
- stand characteristics, USA 3879
- throughfall, acid deposition, USA, spatial variation 7657
- understorey, plant physiology, climatic factors, USA 8934
- weed control
  - cleaning
    - USA 2650
      - growth 2651
- wildlife, birds, herbicides, Canada 5829

Picea sitchensis
- acid deposition
  - frost resistance
    - age of trees, genetic variation 2887
    - UK, assessment 5317
- afforestation
  - peatlands, carbon cycle, UK 2633
  - soil chemistry, UK 5353
  - wetlands, streams, water quality, UK 4081
- age, basal area, streams, nitrate, UK 8864
- air pollution
  - deposition, snow, UK 333
  - ozone
    - canopy, deposition, UK 7987
    - roots, cell division 7998
  - salt spray, streams, UK, water quality 7874
  - soil chemistry, plant water relations, UK, nitrates 5243

Picea sitchensis *cont.*
- air pollution *cont.*
  - throughfall, soil chemistry, UK, nitrates 5242
  - UK
    - foliage
      - leaching 4560
      - microbial flora 4570
      - nutrients 4559
    - fumigation equipment 4189
    - fungal diseases, resistance 4571
    - growth 4558
    - research 4574
- buds, phenology, carbon dioxide enrichment, temperature, UK 2008
- callus, cell walls, grafting 2043
- carbon dioxide enrichment
  - air pollution, ozone, seedling growth 2874
  - plant water relations, water stress, plant nutrition, seedling growth 8106
- clear felling
  - hydrology, UK 5830
  - soil chemistry, UK 7127
  - watersheds, UK, aluminium 353
- cones, distribution, girdling, plant growth regulators, gibberellins 3042
- cross pollination, isoenzymes 3028
- drought, plant growth regulators 4518
- fertilizers
  - sewage, groundwater, quality, UK 895
  - tree injection, UK 2613
- fishes, water quality, forest ecology, USA 2170
- foliage
  - nitrogen, nutrient allocation, UK 1944
  - plant nutrition, air pollution, UK 6453
- forest decline, soil water, chemistry, salt injury, Denmark 1295
- forest health, UK, forest decline 6501
- forest influences, streams, chemistry, acid deposition, UK 8868
- forest litter
  - decomposition
    - carbon dioxide enrichment
      - laboratory tests 5255
      - plant nutrition, nitrogen 7900
- forest nurseries, herbicides, UK, tolerance 2644
- forest plantations
  - crown, morphology, simulation 4218
  - forest influences, soil chemistry, UK 360
  - spacing, air flow, canopy, UK 8014
  - streams, pH, UK 354
- fungal diseases
  - *Heterobasidion annosum*
    - spread 2262
    - UK 2263
      - control, economics 3169
      - resistance 4571
- genetic variation
  - clonal variation, wood density, Denmark 567
  - isoenzymes, genetic erosion 9966
- geographical information systems, site class assessment, UK 5180
- grafting, dormancy, treatment 2599
- herbicides, UK, tolerance 2645
- humus, mineralization, fertilizers, Canada 6289
- insect pests
  - *Elatobium abietinum*
    - UK
      - fertilizers 2612
      - growth 3178
  - *Hylobius abietis,* UK, damage 2353
  - *Pissodes strobi*
    - Canada, resistance 1490
    - pest resistance 5756
- mycorrhizas
  - Basidiomycotina 5597
  - forest nurseries, Irish Republic 8279
  - host specificity 5603
  - *Laccaria proxima,* fertilizers, forest nurseries, UK 906
  - rhizosphere, protozoa 5606
- natural regeneration, thinning, USA 928

Picea sitchensis *cont.*
- nitrogen, roots, growth, development 6897
- nitrogen fertilizers, UK, *Elatobium abietinum* 2612
- plant nutrition
  - phosphorus, UK, seasonal growth 7959
  - sewage, UK 895
  - whole tree logging, UK, productivity 1136
- plant succession, USA 3095
- provenance, wood anatomy, growth, quality 8558
- reproductive behaviour, crown, forest decline, UK 3033
- rhizosphere, soil biology, enzymes, root systems, UK 5274
- rodents, forest plantations, UK 7542
- roots, frost resistance, planting stock, cold storage 3558
- rotations, growth, whole tree logging, UK 6110
- salt spray, soil toxicity, Denmark 8000
- seed orchards
  - genetic diversity, Canada 3982
  - reproductive behaviour, Canada, estimation 4266
- seed treatment, dormancy breaking, chilling, techniques 3384
- seeds, taxonomy, analysis, proteins 1320
- shoots, morphology, resin canals, pest resistance, Canada 1490
- silvicultural systems, UK, wood properties 6133
- silviculture, wood properties, Northern Ireland 7117
- soil chemistry, weathering, UK 1904
- soil formation, Denmark, weathering 8016
- spacing, growth effects, wood properties, UK 2655
- stand characteristics, plant competition, yield tables, simulation 6827
- stem form, increment, mortality, UK 9576
- stems, mechanics, wind damage, UK 6272
- taxonomy, plant morphology, plant composition, USA 501
- tissue culture
  - cell suspensions, cryopreservation, somatic embryogenesis, techniques 9445
  - somatic embryogenesis, cryopreservation 7745
- watersheds
  - hydrology, UK, research 702
  - soil amendments, lime, soil chemistry, UK 3414
- wind, turbulence, stems, mechanics, UK 6271
- wind damage, fertilizers, UK 3564
- yield forecasting, UK, simulation 2694

Picea smithiana
- diameter, cones, seeds, India 3388
- forests, synecology, stand structure, natural regeneration, India 2167
- seeds, taxonomy, analysis, proteins 1320
- silvicultural systems, site class assessment, soil chemistry, India 2815
- soil chemistry, humic acids, soil fertility, India 286

Piceirhiza nigra, mycorrhizas, *Picea abies,* enzymes 9993

Picnic areas (*see* Amenity and recreation areas)

Picoides arcticus, birds, boreal forests, Canada, feeding behaviour 7520

Picoides borealis
- birds
  - *Pinus,* USA, habitats 5179
  - *Pinus palustris,* cavities in trees, USA 4070
  - *Pinus* (Southern), USA, management 3209
  - stand structure, USA 8367
  - USA
    - management, population dynamics 9209
    - population change 9210

Picoides pubescens, birds, feeding behaviour, dead trees, bottomland forests, USA 6680
Picoides tridactylus, birds, boreal forests, Canada, feeding behaviour 7520
Picramniaceae, taxonomy 7220
Pigs (*see* Wild pigs)
Pileolaria pistaciae, fungal diseases, *Pistacia integerrima,* India, foliage 3168
Pimelodendron amboinicum, wood anatomy 414
Pinaceae, insect pests, *Haematoloma dorsatum,* Italy, ecology 9141
Pinanga, fungal diseases, *Guignardia candeloflamma,* Australia 8307
Pineus havrylenkoi, insect pests, Argentina 2301
Pineus pini, insect pests, *Pinus,* Middle East, geographical distribution 8330
Pinus
  afforestation
    agricultural land, stand establishment, mortality, South Africa 7778
    hydrology, erosion, Spain 9238
  agroforestry, amenity forests, management, forest fires, France 5877
  air pollution, chlorinated hydrocarbons, foliage, chemistry, Finland 7989-7990
  bark, lichens, air pollution, Finland, chemistry 7996
  boreal forests, forest health, monitoring, Canada 9866
  breeding programmes
    pulpwood production, intensive silviculture, South Africa 553
    vegetative propagation, pulpwood production, South Africa 552
  carbon cycle, stand characteristics, books 6797
  chloroplast genetics, evolution 9037
  choice of species, afforestation, altitude, France 9421
  coniferous forests, plant succession, soil structure, Russia 285
  evolution, speciation, geographical distribution 8132
  exotics, species trials, minor forest products, India, reviews 6870
  fertilizers, irrigation, soil chemistry, Poland 137
  forest decline, air pollution, ozone, reviews 7984
  forest litter, soil organic matter, USA, nitrogen, mineralization 5254
  forest plantations
    Brazil, development 49
    insect pests, Venezuela 6645
    soil biology, plant parasitic nematodes, surveys 669
  forests, evaporation, simulation 8511
  fungal diseases
    Fusarium subglutinans, USA 5645
    Gibberella fujikuroi var. *subglutinans,* Japan, geographical distribution, pathogenicity 3166
    Heterobasidion annosum, USA 606
    Mycosphaerella dearnessii
      China, isolates, differentiation 9120
      USA, isolates, differentiation 9120
    Phytophthora
      South Africa 8291
        reviews 1452
    Pythium
      South Africa 8291
        reviews 1452
  genetic variation, inbreeding depression, conservation 5480
  geographical distribution, temperature, climatic zones 7867
  improvement fellings, Canada 4421
  indicator plants, air pollution, chlorinated hydrocarbons, Europe 1978
  insect pests
    Acantholyda erythrocephala, Canada, control 678
    Cedestis subfasciella, Spain, biology, damage 8332
Pinus *cont.*
  insect pests *cont.*
    Clavigesta sylvestrana, Spain, biology, damage 8332
    Cuba, population dynamics 9136
    Dendrolimus, China, research, pest management 2335
    Diprion pini
      biology, plant composition 5765
      Germany, population dynamics 5767
    Exoteleia dodecella, Spain, biology, damage 8332
    Formica exsectoides, USA, control 666
    Hylobius abietis, France, monitoring 5737
    Hymenoptera, air pollution, Russia 663
    Ips grandicollis, Australia, ecology 2297
    Monochamus alternatus, Japan, laboratory rearing 10047
    Ocnerostoma piniariellum, Spain, biology, damage 8332
    Pissodes strobi
      Canada, integrated pest management 7497
      North America
        biological control 680
        parasitoids 680
    Pityophthorus lichtensteini, UK 5741
    Thaumetopoea wilkinsoni, Israel, parasitoids 2365
    Tomicus piniperda, China, life tables 9170
  invasion, choice of species, fynbos, South Africa, expert systems 9359
  mixed forests, quality, understorey, Poland 1816
  mycorrhizas, plant nutrition, nutrient uptake 8256
  national parks, land use, remote sensing, Landsat, Spain 6751
  natural regeneration, stand characteristics, botanical composition, climatic change, Poland 7330
  palaeobotany, flowers, Canada 5378
  plant parasitic nematodes
    Bulgaria, surveys 9181
    Bursaphelenchus, cellulase, production, virulence 4896
    Bursaphelenchus xylophilus, Korea Republic, pathogenicity, control 8346
  pollen, vegetation, simulation, USA 4805
  runoff, erosion, USA 5837
  salamanders, clear felling, USA, population dynamics 3195
  seed dispersal, seed size 8125
  silvicultural systems, hydrology, Cuba 4937
  soil biology
    microorganisms, controlled burning, Spain 8883
    mycorrhizas, Russia, seasonal variation, fertilizers 8802
  soil chemistry
    cation exchange capacity, Canada 5250
    weathering, soil organic matter, Sweden 292
  soil formation, Italy 8783
  soil fungi, keratinophilic fungi, Slovakia 1922
  stumpage value, Canada 9651
  tissue culture, genetic transformation, reviews 6057
  vegetation types, surveys, USA, history 3892
  wood anatomy, parenchyma 4625
Pinus albicaulis
  air pollution, deposition, USA 332
  cones, production, USA, estimation 2565
  forest decline, remote sensing, USA 470
  fungal diseases
    Cronartium ribicola
      forest decline, USA 470
      natural regeneration, USA 9105
Pinus aristata, shoots, plant nutrition, plant physiology, USA 2036
Pinus armandii
  air pollution, tolerance 7083
  fungal diseases, *Coccomyces guizhouensis,* China 2253
Pinus attenuata, chloroplast genetics, genetic variation, USA 563
Pinus attenuata × Pinus radiata
  fungal diseases, *Mycosphaerella dearnessii,* France, control 8309
  genetic variation, selection criteria, France, silvicultural characters 9035
Pinus balfouriana, dendroclimatology, USA 8465
Pinus banksiana
  air pollution, tolerance 7083
  birds, *Dendroica kirtlandii,* forest fires, USA 3218
  carbon cycle, Canada 4490
  cones
    decay, resistance 604
    life tables, Canada, statistical analysis 3843
  container grown plants, sex expression, stress 9870
  direct sowing
    Canada, insect pests, damage 2359
    soil compaction, Canada 2634
  embryo culture, micropropagation 1701
  fertilizers, mulching, seedling growth, Canada 6116
  forest fires, natural regeneration, wood ash, Canada 1198
  forest litter, decomposition, Canada, nitrogen, availability 7912
  forest nurseries, seedling growth, Canada, container grown plants 8595
  forest plantations
    insecticides, application, Canada 5794
    plant competition, woody weeds, Canada, growth 4407
    site class assessment, Canada 8703
    volume determination, equations, nondestructive testing 6161
  forests, remote sensing, radar, backscatter, simulation 7677
  fungal diseases
    Armillaria ostoyae, USA, population structure 9094
    Endocronartium harknessii, thinning, Canada, distribution 6632
  genetic transformation, biolistics 6591
  injuries, thinning, Canada 946
  insect pests
    Choristoneura pinus
      Canada, population dynamics 5715
      USA, population dynamics 1482
    Monochamus saltuarius, China 5740
    Pissodes strobi
      Canada 2359
        control 9186
  leaf area index, measurement 4186
  lignification, enzyme activity 1275
  mixtures, increment, Canada 4361
  mycorrhizas
    ecology, forest fires, Canada 7394
    Laccaria bicolor, population genetics, USA 9997
  natural regeneration
    forest fires, Canada 8882
    seedbeds, soil water, light, laboratory tests 9964
  planting, Canada, insect pests, damage 2359
  provenance trials, genotype environment interaction, climatic change, simulation 1659
  roots, drought resistance, plant physiology, protein synthesis 1273
  seed germination
    radionuclides, Canada 2861
    seed treatment 3387
  seed orchards, pollen, maturation, temperature, Canada 6038
  seedlings
    frost resistance, enzymes, adenosinetriphosphatase 6476
    nutrient deficiencies, nitrogen, plant water relations, osmotic pressure 7941

Pinus banksiana *cont.*
- seedlings *cont.*
  - photosynthesis, plant nutrition, nitrogen 8111
  - plant nutrition, nitrogen, metabolism 317
  - water stress
    - abscisic acid, plant physiology 3018
    - turgor 2845
- sex expression
  - plant nutrition
    - gibberellins
      - plant water relations 1318
      - topping 1318
- site class assessment, stand density, USA 1839
- thinning
  - plant morphology, Canada, growth 6127
  - wood density, increment, Canada 6364
- tree breeding
  - increment, statistical analysis, Canada 794
  - wood properties 8201
- volume determination, equations, Canada 1819

Pinus brutia
- air pollution, heavy metals, indicator plants, Greece 7106
- essential oils, chemotaxonomy, Greece, plant composition 8686
- insect pests
  - *Matsucoccus josephi*
    - Greece, geographical distribution, history 4881
    - Mediterranean Region 2315
    - Middle East, geographical distribution 8330
  - *Pineus pini,* Middle East, geographical distribution 8330
- seed germination, fire ecology, Mediterranean Region 8947

Pinus brutia × Pinus halepensis
- micropropagation, methodology 4273
- vegetative propagation, Greece, methodology 4274

Pinus canariensis
- essential oils, chemotaxonomy, Greece, plant composition 8686
- foliage, air pollution, heavy metals, Argentina 4555
- micropropagation, culture media 4291
- roots, chemotaxonomy, mitosis, ascorbic acid 9899

Pinus caribaea
- air layering, Venezuela 2597
- biomass production, nutrient uptake, savannas, Nigeria 2704
- ferrallitic soils, soil properties, Cuba 1086
- forest nurseries, growing media, Dominican Republic 6088
- forest plantations
  - research, Caribbean 953
  - soil properties, Sri Lanka 5348
  - weed control, herbicides, phytotoxicity, Cuba 1763
- fungal diseases
  - *Botryodiplodia theobromae,* Venezuela, blue stain 2285
  - *Ceratocystis,* Cuba 1458
- insect pests
  - *Atta laevigata,* Venezuela, host parasite relationships 4044
  - *Dioryctria horneana,* Cuba, oleoresins 5392
  - *Rhyacionia frustrana,* Cuba, biological control 1499-1500
- plant nutrition, boron, copper, seedling growth, plant composition 316
- plant parasitic nematodes, Nigeria 9179
- planting stock, bare rooted stock, cold storage 6906
- provenance trials, wood properties, Australia 6866
- seed weight, seed germination, seedling growth, genetic variation 75
- somatic embryogenesis, glycoproteins 124

Pinus caribaea *cont.*
- species trials
  - provenance trials, Venezuela 6024
  - reclamation, mined land, Cuba 1540
- stem form, Australia 6166
- thinning, growth models, Australia, economic evaluation 8648

Pinus cembra
- afforestation, treelines, dendrochronology, dieback, Switzerland 6762
- air pollution, tolerance 7083
- carbon dioxide enrichment, dendrochronology, Austria 6764
- frost resistance, acclimatization, photosynthesis 1886
- fungal diseases, *Cronartium ribicola,* Romania, hybrids, disease resistance 2186
- genetic variation, cones, seeds, Romania 9040
- hybrids, genetic variation, Romania, growth 2186
- increment, temperature, Austria 2799
- light, diameter, Italy, growth effects 6362
- plant water relations, Italy 3615
- seeds
  - drying, seed germination 4267
  - storage, seed germination 4267
- stem form, forking and multiple stems, Switzerland 6394

Pinus cembroides
- seeds, genetic variation, Mexico, fatty acids 424
- synecology, forest management, Mexico 4773

Pinus clausa
- birds, forest fires, clear felling, USA 9213
- fungal diseases, *Phytophthora cinnamomi,* USA, damage 5057
- natural regeneration, logging, forest fires, USA 5469
- short rotation forestry, USA 6098
- species trials, USA 5053
- wildlife, lizards, clear felling, USA 4920

Pinus contorta
- afforestation, trials, international cooperation, Russia 9502
- air pollution
  - deposition, USA 332
  - sulfur dioxide, salt injury, Europe 3644
- amenity and recreation areas, USA, hazards, analysis 8455
- bark
  - forest fires, feeding behaviour, *Cervus elaphus* 3200
  - thickness, variation, provenance, Sweden 990
- canopy, structure, light penetration, USA 3553
- canopy gaps, size, soil chemistry, USA 1143
- carbon cycle, respiration, stand development, USA 2851
- carbon dioxide enrichment, air pollution, ozone, seedling growth 2874
- chloroplast genetics 5516
- cones, fire effects, natural regeneration, USA 1200
- conferences 4170
- container grown plants, roots, Canada, growth 2046
- controlled burning, site preparation, artificial regeneration, Canada 8880
- enzymes
  - β-glucosidase, xylem, lignin, synthesis 6473
  - oleoresins 6495
- establishment, plant competition, ground vegetation, Canada 1745
- fire effects, natural regeneration, landscape ecology, USA 1200
- foliage
  - morphology, chemistry, site class assessment, Sweden 3745
  - phenolic compounds, soil pH, USA 9690
- forest economics
  - nature conservation, simulation, USA 1870

Pinus contorta *cont.*
- forest economics *cont.*
  - silvicultural systems, simulation, USA 1870
- forest litter
  - decomposition
    - Canada, nitrogen, availability 7912
    - microorganisms, Canada 5263
    - Sweden 6281
      - mathematical models 9701
- forest plantations, plant competition, USA, survival 6922
- fungal diseases
  - *Endocronartium harknessii,* Canada, resistance 5641
  - *Gremmeniella abietina,* Sweden 4867
  - *Heterobasidion annosum,* resistance, enzymes 5628
  - *Melampsora medusae,* USA 5659
  - *Ophiostoma,* Canada, insect pests, *Dendroctonus* 6637
  - *Ramichloridium pini,* UK 2270
  - rust diseases, stand density, Canada 6631
- genetic transformation, biolistics 6591
- genetic variation
  - heritability, seedling growth, Canada 5479
  - isoenzymes, evolution, USA 9047
- height classes, USA 229
- increment, volume, plant nutrition, Sweden 6182
- injuries, oleoresins, growth effects, USA 7206
- insect pests
  - *Dendroctonus ponderosae*
    - Canada
      - control 7479
      - fungal diseases, *Ophiostoma* 6637
    - USA, growth effects 7205
  - *Hylobius warreni,* Canada, reviews 7467
  - *Ips pini,* Canada, aggregation pheromones 6658
  - *Microdiprion pallipes,* Sweden 9173
  - *Pissodes terminalis,* biology 8342
  - Scolytidae, Canada, interactions 2345
  - *Zeiraphera diniana,* UK 7453
- leaf area index, techniques 5944
- logs, decomposition, cycling, USA 2826
- mixtures, site class assessment, yield forecasting, Canada 5177
- mycorrhizal fungi, symbiosis, Orchidaceae 9996
- mycorrhizas
  - competition 8271
  - *Paxillus involutus,* plant nutrition, nitrogen 5604
  - *Rhizopogon,* host specificity 5602
  - *Suillus bovinus,* plant nutrition, nitrogen 5604
  - Sweden 8259
  - synecology, canopy gaps, USA 4013
- nitrogen fertilizers, plant nutrition, increment, Canada 9462
- NPK fertilizers, irrigation, increment, Denmark 911
- photosynthesis, age of trees, senescence, USA 2992
- plant diseases, plant composition, USA, *Dendroctonus ponderosae* 7205
- plant nutrition
  - iron, waterlogging, USA 3638
  - nitrogen cycle, fertilizers, Canada 325
  - soil chemistry, biomass, USA 9730
- plant physiology, hydroponics, pH 4680
- plant succession, seral stages, increment, USA 4792
- progeny testing, genetic variation, Sweden 1431
- provenance trials 4170
  - adaptation, geographical distribution, Canada 2548
  - site class assessment
    - Canada 3367
    - Sweden 3367
  - spacing, Canada 9419
  - Sweden 3373
- pruning, work study, economics 6139

- ***Pinus contorta*** *cont.*
  - resins, defence mechanisms, abietic acid, biosynthesis 8114
  - roots
    - development
      - methodology 5009
      - morphology, genetic engineering, *Agrobacterium rhizogenes* 3133
  - seed dispersal, wind, seed germination 479
  - seed treatment, dormancy breaking, chilling, techniques 3384
  - shoot cuttings, tissue culture, auxins, growth rate 3405
  - shoots
    - plant nutrition, plant physiology, USA 2036
    - structure, photosynthesis, light, carbon dioxide 8109
  - site preparation, stand establishment, increment, Sweden 9504
  - squirrels, *Tamiasciurus hudsonicus,* Canada, prevention 1511
  - stand characteristics, plant competition, yield tables, simulation 6827
  - stand development, Canada, methodology 2169
  - stand structure, forest fires, USA 4809
  - stem form, taper, Canada 4385
  - subalpine forests, dendroclimatology, USA 4470
  - sulfur fertilizers, nitrogen fertilizers, foliage, Canada 897
  - tree breeding, phenotypic selection, genetic gain 9049
  - vegetation management, controlled burning, edible species, Canada 374
  - volume determination, Canada, stumps, residues 2684
  - watersheds, soil amendments, lime, soil chemistry, UK 3414
  - wildlife, *Thomomys talpoides,* USA, damage 6922
  - wood chemistry, extractives 4669
- ***Pinus coulteri***
  - forest influences, soil chemistry, USA 5360
  - insect pests, *Essigella* 5692
- ***Pinus cubensis***
  - fungal diseases
    - *Ceratocystiopsis minima,* Cuba 1458
    - *Ceratocystis brunneo-crinita,* Cuba 1458
  - insect pests, *Dioryctria horneana,* Cuba, oleoresins 5392
  - species trials, provenance trials, Venezuela 6024
- ***Pinus densata,*** chloroplast genetics, hybrids, taxonomy 9048
- ***Pinus densiflora***
  - forest influences, soil fauna, arthropods, Japan 9714
  - forest litter, decomposition, soil biology, Collembola, Japan 8799
  - forest plantations
    - dunes, plant colonization, Japan, *Quercus serrata* 2096
    - natural regeneration, site factors, Japan 7772
  - genetics, isoenzymes, methodology 5501
  - insect pests
    - *Acanthocinus griseus,* Japan, biology 6655
    - *Monochamus alternatus*
      - biology 661
      - Japan
        - biological control, entomogenous fungi 2377
        - biology 5755
    - *Monochamus saltuarius,* Japan, biology, seasonal behaviour 4888
    - *Thecodiplosis japonensis*
      - East Asia 5769
      - endophytes, Japan 8252
  - plant parasitic nematodes, *Bursaphelenchus xylophilus,* stems, respiration 4895
- ***Pinus densiflora*** *cont.*
  - plant succession
    - landscape
      - sociology
        - Japan 7292
        - Korea Republic 7292
    - soil chemistry, humus, Japan 7883
  - pollen germination 2108
  - progeny testing, genetic variation, genetic gain, Korea Republic 8204
  - roadside plantations, forest influences, air pollution, Japan 7126
  - seedlings
    - acid deposition, simulation, growth, damage 8834
    - nitrogen fertilizers, plant nutrition, nitrogen, plant water relations 2852
  - stumpage value, Korea Republic 8748
  - thinning, photointerpretation, stand structure, equations 8655
  - tree breeding, genetics, Japan 1420
  - understorey
    - Japan 9944
    - light, Japan, crown, broadleaves 8064
  - wood anatomy, tumours 397
  - wood chemistry, trace elements, *Bursaphelenchus xylophilus, Monochamus alternatus* 2977
- ***Pinus discolor,*** geographical distribution, Mexico 6534
- ***Pinus echinata***
  - birds
    - forest management, USA 4071
    - *Picoides borealis,* USA, habitats 5179
  - controlled burning, stand characteristics, forest recreation, USA 6378
  - direct sowing, site preparation, burning, USA 4340
  - fungal diseases, damping off, seed germination, seedling growth, acid deposition 10004
  - gas exchange
    - acid deposition, USA 340
    - air pollution, ozone, USA 340
    - ozone, water stress 3002
  - growth models
    - height, USA 5179
    - USA 802
  - height, site class assessment, USA 5178
  - microclimate, clear felling, USA 5349
  - mycorrhizas, *Pisolithus tinctorius,* plant composition, fertilizers 4015
  - natural regeneration, weed control, woody weeds, USA 1769
  - planting stock, protection, USA 6084
  - regeneration, USA 2464
  - silvicultural systems, stand characteristics, USA 7304
  - thinning, increment, USA 4355
  - volume tables, USA 6174
- ***Pinus edulis***
  - dead wood, estimation, USA 4381
  - genetic variation, population genetics, USA 6590
  - insect pests, *Dioryctria albovittella,* soil fertility, mycorrhizas, interactions 4014
  - plant water relations, plant nutrition, nitrogen, USA 4505
  - rangelands, erosion 7554
  - seedlings, plant composition, starch, metabolism 2088
  - woodlands, erosion, remote sensing, USA 709
- ***Pinus eldarica*** (*see also Pinus brutia*)
  - carbon dioxide enrichment
    - biomass, USA 3485
    - photosynthesis, USA, growth 3003
  - insect pests
    - *Matsucoccus josephi,* Middle East, geographical distribution 8330
    - *Pineus pini,* Middle East, geographical distribution 8330
  - photosynthesis, carbon dioxide enrichment, USA 5226
  - plantations, increment, Azerbaijan 1004
  - planting stock
    - explants, increment, USA 1688
    - seedlings, increment, USA 1688
  - tissue culture, explants 1688
- ***Pinus elliottii***
  - breeding programmes, progeny testing, selection criteria, Zimbabwe 7351
  - canopy, foliage, remote sensing, USA 8732
  - carbon cycle, simulation, USA 3005
  - dead wood, arthropods, ecology, Australia 2297
  - fertilizers
    - soil chemistry, USA, persistence 2618
    - split dressings, USA 9457
  - foliage
    - cycling
      - fertilizers, USA 2859
      - weed control, USA 2859
    - reflectance, plant composition, chlorophyll 6465
  - forest litter, measurement, decomposition, fungi, South Africa 294
  - forest management, USA, pulpwood 1784
  - forest nurseries
    - pruning, frost resistance, USA 273
    - wrenching, frost resistance, USA 273
  - forest plantations
    - phosphorus fertilizers
      - forest litter, South Africa 9466
      - soil types, South Africa 126
    - weed control, USA 170
  - fungal diseases
    - *Botryodiplodia theobromae*
      - seeds
        - reviews 603
        - South Africa 603
        - USA 4016
    - *Cronartium fusiforme*
      - plant composition, monoterpenoids, resistance 9107
      - silviculture, USA 4024, 10021
      - simulation, USA 7676
      - USA
        - assessment 3167
        - resistance 2188
    - *Diplodia pinea* 10012
    - *Ploioderma hedgcockii,* USA, histopathology 8310
  - genetic variance, heritability, statistical analysis 8507
  - genetic variation, roots, morphology 5598
  - increment, distribution, South Africa, simulation 4384
  - insect pests
    - *Rhyacionia frustrana,* plant composition, host specificity 6451
    - seed orchards, USA, control 4045
    - *Sirex noctilio,* Argentina, control 1494
  - mycorrhizas
    - *Pisolithus tinctorius*
      - genetic variation 5598-5599
      - seedlings, infection 2247
  - nutrient uptake, simulation, USA 2860
  - old fields, site preparation, USA, pest control 6927
  - photosynthesis, fertilizers, USA, seasonal variation 4695
  - progeny testing, USA, disease resistance, *Cronartium fusiforme* 2188
  - resin tapping, China 5163
  - respiration, USA 5412
  - roots, nutrient uptake, simulation 5301
  - sap, groundwater, isotopes, oxygen, South Africa 2832
  - seed longevity, storage 3381
  - seed orchards, seed production, USA 3377
  - seeds, fungal diseases, USA 9089
  - short rotation forestry
    - increment, USA 2703
    - USA 6098
  - site class assessment
    - increment, volume, soil types, Uruguay 1003
    - volume determination, USA, estimation 2686
  - species trials, USA 5053
  - stand establishment, planting stock, size, water stress, USA 3443
  - stem form, Australia 6166
  - volume tables, USA 6174

Pinus elliottii *cont.*
- yield forecasting, Zimbabwe, simulation 6830

***Pinus elliottii* × *Pinus caribaea*,** stem form, Australia 6166

Pinus flexilis
- age structure, USA 5167
- gas exchange, simulation, palaeoecology, USA 4706
- plant nutrition, iron, waterlogging, USA 3638
- stem form, population genetics, USA 3708
- subalpine forests, dendroclimatology, USA 4470

***Pinus funebris*,** genetic variation, isoenzymes, USSR 5514

Pinus halepensis
- agroforestry, rural economy, land use planning, forestry development 8424
- air pollution
  - ozone
    - photosynthesis 6256
    - plant physiology 3646
- coastal plant communities, salt spray, France, damage 6353
- container grown plants, mycorrhizas, Spain, seedling growth 4844
- essential oils, chemotaxonomy, Greece, plant composition 8686
- fire effects, synecology, Israel 1199
- foliage
  - buffering capacity, acid rain 3691
  - damage
    - air pollution, ozone 3653
    - salt spray 1172
- forest decline, salt spray, France 1172
- forest fires
  - natural regeneration, forest management, Israel 9777
  - remote sensing, Spain 3696
  - wood ash, seed germination, seedling growth 382
- forest litter
  - decomposition, chemical composition 295
  - soil chemistry, Israel 5257
- forest nurseries, weed control, Algeria 5116
- forest plantations
  - establishment, mortality, seasonal variation, Spain 1746
  - height, increment, climate, Spain 1826
  - natural regeneration, sampling, Italy, statistical analysis 1739
  - site class assessment, statistical analysis, Argentina 225
  - soil formation, Croatia 4602
  - species diversity, vegetation, surveys, Italy 1744
  - thinning, Italy 945
- fungal diseases, forest plantations, Croatia 4855
- humus, soil biology, Spain 1102
- increment 1007
- insect pests
  - *Matsucoccus josephi*
    - Greece, geographical distribution, history 4881
    - Mediterranean Region 2315
    - Middle East, geographical distribution 8330
  - *Pineus pini,* Middle East, geographical distribution 8330
- mycorrhizas 8285
  - fertilizers, refuse, Spain 4002
- rodents, fire ecology, Israel 1196
- roots, chemotaxonomy, mitosis, ascorbic acid 9899
- seed germination
  - fire ecology, Mediterranean Region 8947
  - forest fires, Spain 5364
- silviculture, yield tables, France 6987
- species trials, fuelwood, India 1661
- stand characteristics, mortality, Italy 951
- ultraviolet radiation, photosynthesis, water stress, Greece 7027
- vegetation types, Spain 9007

Pinus halepensis *cont.*
- volume, increment, bark, Spain, equations 5961
- water stress, sap flow, transpiration, Israel 7947

***Pinus hartwegii*,** taxonomy 7241

Pinus heldreichii
- essential oils, Bosnia-Hercegovina 8917
- resins, chemistry 8088

Pinus insularis *(see Pinus kesiya)*

Pinus jeffreyi
- air pollution, ozone, damage, USA 4554
- birds, seed dispersal, USA 693
- forest influences, soil chemistry, USA 8780
- fungal diseases, *Heterobasidion annosum,* USA, spread 9095
- gas exchange, ozone, resistance 3001
- insect pests
  - *Dendroctonus*
    - symbionts, interactions 5758
    - USA, remote sensing 3187
  - *Essigella* 5692
- rodents, seed dispersal, USA 691, 693

Pinus kesiya
- biomass, estimation, volume determination, India, equations 8503
- deforestation, stand structure, Thailand 10094
- forest plantations, thinning, increment, Madagascar, wood properties 8858
- resin tapping, China 5163
- seed germination, stratification, temperature, testing, viability 7728
- shifting cultivation, soil fungi, mycorrhizal fungi, India 8436
- spacing, thinning, increment, Zimbabwe 6942
- species trials, provenance trials, Venezuela 6024
- stem form, eccentricities, thinning, Madagascar 4634

Pinus koraiensis
- afforestation, trials, international cooperation, Russia 9502
- air pollution, tolerance 7083
- genetic variation, population genetics, isoenzymes, Korea Republic 2192
- insect pests, *Monochamus alternatus,* biology 661
- mixed forests, plant succession, simulation, China 5457
- mixtures, silviculture, Russia 9542
- plus trees, genetic variation, seeds, seedlings, Korea Republic 8203
- pruning, Korea Republic, equipment, work study 8657
- selection criteria, site factors, Korea Republic 8206
- stumpage value, Korea Republic 8748
- thinning
  - photointerpretation, stand structure, equations 8655
  - planting, Korea Republic, growth 8656

Pinus lambertiana
- frost injury, USA, wood, grading 1989
- fungal diseases, *Cronartium ribicola,* disease resistance, molecular genetics 9114
- increment, plant competition, growth models, USA 7675

Pinus laricio *(see Pinus nigra)*

***Pinus leiophylla*,** seed production, Mexico 6876

Pinus leucodermis *(see also Pinus heldreichii)*
- air pollution, tolerance 7083
- genetic variation, chemotaxonomy, Mediterranean Region 2194
- self pollination, Italy 3974

Pinus luchuensis
- fungal diseases, *Gibberella fujikuroi* var. *subglutinans,* Japan, geographical distribution, pathogenicity 3166
- insect pests, *Aphrophora paguma,* Japan 7434

Pinus maestrensis
- ferrallitic soils, soil properties, Cuba 1086

Pinus maestrensis *cont.*
- fungal diseases, *Ceratocystis brunneocrinita,* Cuba 1458
- insect pests, *Dioryctria horneana,* Cuba, oleoresins 5392
- spacing, stand development, increment, Cuba 950

Pinus maritima *(see Pinus pinaster)*

Pinus massoniana
- air pollution
  - sulfur dioxide
    - forest decline, China 3669
    - photosynthesis, foliage, chemistry 3669
- chloroplast genetics, hybrids, taxonomy 9048
- dendroclimatology, China 7614
- genetic variation, isoenzymes, China 8213
- insect pests, *Dendrolimus punctatus,* China, control 670
- mycorrhizas, *Pisolithus tinctorius,* seedlings, infection 2247
- resin tapping, China 5163

Pinus maximinoi
- fungal diseases, *Cronartium conigenum,* cones, Guatemala, histology 9090
- provenance, breeding programmes, Colombia 7348
- provenance trials, pulpwood production, South Africa 60

Pinus merkusii
- increment, taungya, Indonesia 2414
- radionuclides, fallout, age determination 1151
- resin tapping
  - China 5163
  - techniques, Indonesia 968
- seed germination, stratification, temperature, testing, viability 7728
- species trials, provenance trials, Venezuela 6024

Pinus monophylla
- foliage, biomass, estimation 4379
- plant succession, grazing intensity, USA 2385
- plant water relations, synecology, USA 8808

***Pinus montezumae*,** seed production, Mexico 6876

Pinus monticola
- advance growth, liberation felling, USA 2627
- canopy, throughfall, USA 3690
- mycorrhizas, *Pisolithus tinctorius,* nutrition physiology 4000

Pinus mugo
- afforestation, treelines, dendrochronology, dieback, Switzerland 6762
- biomass, synecology, Slovakia 7302
- carbon dioxide enrichment, air pollution, ozone, seedling growth 2874
- choice of species, protection forests, avalanches, Germany 6869
- forests, synecology, Slovakia 521
- fungal diseases, *Endocronartium pini,* UK, inoculation, infection 9119
- genetic variation, isoenzymes, USSR 5514
- insect pests
  - Aphididae, Italy 9143
  - *Cinara pini,* Europe, taxonomy 630
- photosynthesis, acid deposition, plant growth regulators, benzyladenine 462
- population genetics, isoenzymes, Switzerland 5489
- wildlife, birds, Slovakia 10078

***Pinus mugo* × *Pinus sylvestris*,** genetic variation, isoenzymes, population genetics, Poland 9976

Pinus muricata
- amenity and recreation areas, USA, hazards, analysis 8455
- chloroplast genetics, genetic variation, USA 563
- controlled burning, soil water, infiltration, USA 6382
- foliage, phenolic compounds, soil pH, USA 9690

***Pinus muricata** cont.*
  forest litter, decomposition, nitrogen, USA 9705
  precipitation, USA 4083
Pinus nigra
  agroforestry, forest plantations, management, France 5877
  air pollution, tolerance 7083
  dendrochronology, Spain 6766
  epiphytes, lichens, altitude, Greece 3945
  essential oils
    chemistry 8918
    chemotaxonomy, Greece, plant composition 8686
  foliage, air pollution, heavy metals, Argentina 4555
  forest borders, air pollution, deposition, Netherlands 6345
  forest decline, France, insect pests, fungal diseases 3815
  forest plantations, decay fungi, Italy, ecology, succession 6606
  fungal diseases
    Cronartium flaccidum, tissue cultures, disease resistance 9112
    Diplodia pinea, Netherlands 1453
    Endocronartium pini, UK, inoculation, infection 9119
    forest plantations, Croatia 4855
    Fusarium, forest nurseries, Italy, control 1467
    Heterobasidion annosum, resistance, enzymes 5628
    Phaeolus schweinitzii, tissue culture, defence mechanisms 8287
    Pythium, forest nurseries, Italy, control 1467
    Rhizoctonia, forest nurseries, Italy, control 1467
  genetic variation, flowering 8214
  goats, *Capra pyrenaica,* Spain 10058
  insect pests
    Magdalis, Spain, biology, damage 9147
    Rhyacionia buoliana, Ukraine, population dynamics 7450-7451
  isoenzymes
    gene mapping
      Belarus 9044
      Latvia 9044
      Russia 9044
      Ukraine 9044
  mycorrhizas, seedlings, disease resistance 9077
  plant morphology, habit, taxonomy, Poland 1322
  pollen germination, air pollution, Slovakia 7212
  population genetics
    isoenzymes, Europe 2187
    Spain 5487
    Turkey 8212
  seed germination, fire ecology, Mediterranean Region 8947
  seed treatment, fungicides, Italy 1467
  site class assessment, site factors, France, yields 2702
  stand characteristics
    natural regeneration, silvicultural systems, Italy 3429
    plant competition, yield tables, simulation 6827
  stand structure, genetic variation, resin tapping, Russia 197
  thinning, agroforestry, France, simulation, growth 9268
  tissue culture, somatic embryogenesis, anatomy, cytology, development 7739
  valuation, computer techniques, France 1050
  varieties, wood chemistry, extractives 8913
  volume, increment, bark, Spain, equations 5961
  volume determination, remote sensing, radar, UK, statistical analysis 3519
  wildlife, birds, New Zealand 6670
  wind damage, Netherlands 1062
Pinus occidentalis, species trials, provenance trials, Venezuela 6024
Pinus oocarpa
  provenance, breeding programmes, Colombia 7348
  species trials, provenance trials, Venezuela 6024
Pinus pallasiana, genetic variation, isoenzymes, USSR 5514
Pinus palustris
  birds, *Picoides borealis,* cavities in trees, USA 4070
  controlled burning
    ecology, ground vegetation, USA 7135
    soil, USA, growth effects 5363
  forest plantations, mensuration, USA, equations 6165
  fungal diseases
    Phytophthora cinnamomi, USA, damage 5057
    Rhizoctonia, USA, control 3171
  growth models, thinning, USA 4393
  heritability, increment, volume 8217
  hurricanes, USA, stems, damage 2900
  increment, basal area, USA, simulation 2505
  molecular genetics 5494
  natural regeneration, canopy, USA 4324
  planting stock
    grading, bare rooted stock 910
    protection, USA, mortality 2624
  seedlings, forest fires, USA, mortality, stand density 4754
  silviculture, USA, conferences 771
  site class assessment, simulation, USA 1006
  species trials, USA 5053
  vegetation types, surveys, USA, history 3892
Pinus palustris* × *Pinus elliottii, gene mapping 8229
Pinus patula
  afforestation
    agricultural land, allelopathy, nutrient deficiencies, South Africa 154
    pastures, Costa Rica, stem form, growth 5051
  biomass, estimation, volume determination, India, equations 8503
  fertilizers, sodium humate, seedling growth 8589
  forest plantations
    diameter, increment, growth models, plant competition 9598
    mycorrhizas, fertilizers, South Africa 4846
    rotations, forest litter, Swaziland 7895
    soil organic matter, Zimbabwe, forest litter, soil fertility 2812
  fungal diseases, *Pythium irregulare,* seedlings, South Africa 5622
  increment, distribution, South Africa, simulation 4384
  mycorrhizas
    Laccaria laccata, forest nurseries, seedling growth 4850
    Thelephora terrestris, forest nurseries, seedling growth 4850
  progeny testing
    wood density
      Belize 3979
      Colombia 3979
    wood properties, South Africa 1425
  provenance, breeding programmes, Colombia 7348
  provenance trials, stems, stem form, breakage, South Africa 61
  rodents, pests, South Africa, forest plantations, control 1516
  seed germination, seed moisture, seedling growth, light, temperature 78
  soil water, repellency, Colombia 1900
  tissue culture, micropropagation, South Africa 4277
  tree breeding
    progeny testing
      genetic variation, Mexico 566
      genetics, heritability, Zimbabwe 557
    South Africa 8190
  wood properties, provenance, South Africa 4633
***Pinus patula** cont.*
  yield forecasting, Zimbabwe, simulation 6830
Pinus peuce
  air pollution, tolerance 7083
  seed germination, seedling growth, plant nutrition, forest nurseries, UK 9469
Pinus pinaster
  acid deposition, seedlings, roots, development 7100
  afforestation, reclamation, France, history 2407
  air pollution, dust, ozone, deposition, France 4551
  Australia
    wood properties
      genetic variation 7113
      site factors 7113
  breeding programmes, Australia 8196
  canopy
    light penetration, France, solar radiation, measurement 4469
    precipitation
      simulation, France 701
      stemflow, throughfall, France 700
  chemotaxonomy, Spain, extractives 3047
  chloroplasts, ultrastructure, air pollution, Spain 3727
  clear felling, burning, soil chemistry, South Africa 4613
  controlled burning, forest litter, cellulose, decomposition, Portugal 7140
  dendrochronology, ecology, history, Spain 2441
  fertilizers, increment, Algeria 900
  foliage
    enzymes, farnesyl-diphosphate farnesyltransferase, purification 8928
    Spain, chemical composition, utilization 6456
  forest decline
    coastal plant communities, France 3808
    forest management, France 3810
    frost injury, soil types, France 3567
  forest fires
    fire effects, soil chemistry, Spain 8035
    forest litter, cellulose, decomposition, Portugal 7140
    nutrients, leaching 384
  forest inventories, stand characteristics, sampling, France 4433
  forest litter
    decomposition
      forest influences, soil chemistry, Portugal 8026
      soil organic matter, lipids, France 1913
    measurement, decomposition, fungi, South Africa 294
  forest plantations
    agroforestry, nitrogen-phosphorus fertilizers, spacing, Greece 8428
    canopy, precipitation, simulation, France 7679
    decay fungi, Italy, ecology, succession 6606
    phosphorus fertilizers, soil types, South Africa 126
    site preparation, site factors, fertilizers, Greece 7780
    spacing, France, growth, wood properties 6924
  fungal diseases
    Armillaria ostoyae, biological control, France 9127
    Melampsora populnea, phenology, provenance, host parasite relationships 4256
  gene mapping 8222
    pollination 8228
  genetic transformation, pollen 7355
  genetic variation, height, Portugal 7352
  growth, carbon dioxide enrichment, water stress, transpiration, interactions 1928
  growth models, methodology, mathematics 4202
  growth rings, wood chemistry, Italy 1249

Pinus pinaster *cont.*
- hybrids, heterosis, provenance trials, France, combining ability 9971
- increment 1007
  - distribution, South Africa, simulation 4384
- insect pests
  - *Dioryctria sylvestrella*
    - France, damage 4882
    - pruning, France, population dynamics 2337
  - *Ips grandicollis,* Australia, reviews 8337
  - *Matsucoccus feytaudi*
    - forest decline, France 4036
    - France
      - monitoring, pheromone traps 5700
      - resistance, provenance trials 9970
  - *Thaumetopoea pityocampa,* forest decline, France 4038
- micropropagation, adventitious roots 5075
- mixed forests, forest management, soil fertility, Spain 1190
- mountain forests, birds, ecology, Spain 8371
- mycorrhizas 5615
  - *Hebeloma cylindrosporum*
    - morphology 5584
    - plant growth regulators, IAA 8284
    - seedlings, plant growth regulators, IAA 2246
  - *Laccaria bicolor,* planting stock, forest soils, bioassays 5574
  - *Suillus collinitus*
    - seedlings
      - nutrition physiology 8257
      - rhizosphere, pH 8257
- plant parasitic nematodes, *Bursaphelenchus mucronatus,* Italy 9182
- progeny testing, early selection, France, statistical analysis 1419
- provenance, salt tolerance, France 4261
- provenance trials
  - Australia 7717
  - France 1675
    - growth, morphology, pest resistance 9970
- remote sensing
  - canopy, chemistry, France 6226
  - radar
    - biomass, stand characteristics, France 3516
    - France, methodology 3514
    - stand structure, France 3520
- roots, copper, plant morphology, growth 8793
- salt tolerance, plant nutrition, provenance trials 9712
- seed germination
  - forest fires
    - Spain 5364
    - temperature, simulation 9774
- seedling growth, photoperiod, temperature, tree breeding 6429
- seedlings
  - chlorophyll, synthesis, light 1276
  - roots, growth, water stress, turgor 7942
  - stress, foliage, phenolic acids 6463
- site class assessment
  - increment, volume, soil types, Uruguay 1003
  - yield tables, Portugal 1844
- soil amendments, slash, wood chips, soil chemistry, Spain 6071
- stand characteristics, plant competition, yield tables, simulation 6827
- stand development, natural thinning, biomass, simulation 6828
- stem form, taper, volume determination, Spain 788
- taper, site factors, Morocco 8862
- tree breeding
  - genetic gain, increment, France 3977
  - progeny testing, heritability, increment, France 5496

Pinus pinaster *cont.*
- volume, increment, bark, Spain, equations 5961
- water stress, seed germination, provenance 9720
- wind, movement, simulation, mechanics 4642

Pinus pinea
- acid deposition, seedlings, roots, development 7100
- chlorophyll, light 6490
- coastal areas, air pollution, Italy, salt spray, surfactants 8837
- dendrochronology, ecology, history, Spain 2441
- edible species, seeds, production, stand characteristics, Portugal 1797
- essential oils, chemotaxonomy, Greece, plant composition 8686
- foliage, air pollution, Italy, waxes, damage 5341
- forest decline, crown, Italy 3025
- forest influences, volatile compounds 8865
- forest plantations
  - agroforestry, France, research 7580
  - decay fungi, Italy, ecology, succession 6606
  - soil formation, Croatia 4602
- growth rings, wood chemistry, Italy 1249
- insect pests
  - *Matsucoccus josephi,* Middle East, geographical distribution 8330
  - *Pineus pini,* Middle East, geographical distribution 8330
- mountain forests, birds, ecology, Spain 8371
- mycorrhizas, forest nurseries, afforestation, France, plant nutrition 5576
- roots
  - chemotaxonomy, mitosis, ascorbic acid 9899
  - copper, plant morphology, growth 8793
  - development
    - assimilation, plant nutrition 2965
    - plant growth regulators 2964
- seedlings
  - fertilizers, roots, development, growth 1716
  - roots, growth, plant growth regulators, cytokinins 448
  - water stress, control, hydrophilic polymers 9718
- soil amendments, slash, wood chips, soil chemistry, Spain 6071
- stand characteristics, plant competition, yield tables, simulation 6831
- ultraviolet radiation, photosynthesis, water stress, Greece 7027
- volume, increment, bark, Spain, equations 5961
- wood chemistry, esters 1253

Pinus ponderosa
- air pollution
  - nitrogen, monitoring, USA 7986
  - ozone
    - acid deposition, enzymes 7093
    - increment, diameter 4553
  - throughfall, USA 8845
  - tolerance 7083
- biomass distribution, climate, USA, simulation 4406
- canopy gaps
  - forest management, forest pests, USA 8986
  - stand structure
    - forest management, USA 8666
    - USA, analysis 8987
- carbon dioxide enrichment
  - biomass, photosynthesis, USA 1878
  - nitrogen fertilizers, carbon cycle 5302
- cones, decay, resistance 604
- fire danger, USA, fuels, sampling 1191
- foliage
  - carotenoids, seasonal variation, photosynthesis, USA 6477
  - development 2042
  - ozone, gas exchange, carboxylation 6497

Pinus ponderosa *cont.*
- forest fires, mortality, simulation, USA 380
- forest nurseries, lifting, storage, USA 907
- forest plantations
  - planting stock, plant competition, USA 4329
  - weed control
    - USA, economics 1756
    - woody weeds, herbicides, USA 4343
- fungal diseases
  - *Endocronartium harknessii,* in vitro culture 2282
  - *Heterobasidion annosum,* USA, spread 9095
  - *Melampsora medusae,* USA 5659
- genetic variation
  - drought resistance, plant physiology, plant morphology, USA 1889
  - gas exchange, photosynthesis, transpiration, North America 8198
- genetics, inbreeding, USA 569
- height classes, USA 229
- increment
  - plant competition, growth models, USA 7675
  - stand density, USA, statistical analysis 1840
- insect pests
  - *Coloradia pandora,* thinning, USA 9148
  - *Dendroctonus,* symbionts, interactions 5758
  - *Dendroctonus brevicomis,* USA, attractants 656
  - *Essigella* 5692
  - *Ips pini,* USA 7482
  - *Neodiprion gillettei,* defoliation, seedling growth 5766
- *Melampsora larici-populina,* USA 5659
- mycorrhizas
  - forest nurseries, Argentina, seedling growth 4009
  - *Hebeloma crustuliniforme,* roots, translocation 4004
  - host specificity 5603
  - *Laccaria bicolor,* roots, translocation 4004
  - rhizosphere, protozoa 5606
  - seedlings, radionuclides, uptake 4007
- nitrogen cycle, forest fires, USA, monoterpenes 3636
- nutrient allocation, ozone, simulation 1977
- ozone
  - nutrient allocation, stress factors, interactions 1975
  - nutrient deficiencies, simulation, interactions 1976
- phloem, resins, USA 432
- photosynthesis, age of trees, senescence, USA 2992
- plant nutrition
  - growth 7075
  - iron, waterlogging, USA 3638
- pollen germination, biochemistry 4647
- population dynamics, increment, USA, equations 9962
- provenance trials, USA 2550
- pruning, work study, economics 6139
- remote sensing, radiometry, reflectance, USA 4452
- respiration, USA 5412
- roots, soil physical properties, soil parent materials, USA 4486
- seedling growth
  - carbon dioxide enrichment, nutrient deficiencies, nitrogen 7967
  - gas exchange, carbon dioxide enrichment, temperature 3552
  - nitrogen fertilizers, mineralization, pot experimentation 7662
- seedlings
  - air pollution, effects, methodology 7655
  - biosynthesis, alkaloids 9852
  - ozone, water stress, plant nutrition, nitrogen 8105
  - water stress 2828

Pinus ponderosa *cont.*

- seeds, chemistry, molecular genetics, phylogeny 440
- sewage, soil chemistry, USA 896
- squirrels
  - *Sciurus aberti*
    - cones, USA 8359
    - USA
      - damage 432
      - feeding behaviour 6672
      - nesting 5821
- understorey
  - remote sensing
    - USA 1343
    - video cameras, USA 5204
- virgin forests, stand characteristics, USA, nature conservation 3956
- wildlife, birds, New Zealand 6670

Pinus pseudostrobus

- increment
  - Mexico 6982
  - mixed forests, Mexico 9343
  - variation, Mexico, mixed forests 226
- seed production, Mexico 6876

Pinus pumila

- biomass production, Japan 4400
- isoenzymes
  - gene mapping
    - Belarus 9044
    - Latvia 9044
    - Russia 9044
    - Ukraine 9044

Pinus pungens, natural regeneration, forest fires, soil chemistry, USA 381

Pinus radiata

- agroforestry
  - economics, Australia, simulation 7578
  - forest plantations, Chile 5878
  - plant competition, foliar diagnosis, statistical analysis, New Zealand 4957
  - soil chemistry, New Zealand 4958
- air pollution, sulfur dioxide, growth, plant composition 3663
- allelopathy, plant composition, forest litter, Spain 7315
- artificial regeneration
  - planting stock
    - grading, morphology, South Africa 182
    - mortality, South Africa 183
  - site preparation
    - soil chemistry, plant nutrition, South Africa 180
    - soil organic matter, South Africa 181
  - trials, site preparation, soil physics, South Africa 179
- aspect, plant physiology, New Zealand, measurement, carbon isotopes 4694
- Australia
  - wood properties
    - genetic variation 7113
    - site factors 7113
- bacterial diseases, *Agrobacterium tumefaciens*, genetic variation, resistance 5666
- biomass, cycling, Australia 6183
- carbon dioxide enrichment, plant nutrition 269
- chloroplast genetics, genetic variation, USA 563
- clear felling
  - burning, erosion, runoff, Chile 5843
  - forest litter, cycling, Spain 5251
- dangerous trees, databases, USA 5906
- evaporation, New Zealand, seasonal variation 1124
- fire danger, fuels, moisture, Australia 372
- foliage
  - age, branches, biomass, New Zealand 3734
  - air pollution, nutrient deficiencies, major elements 1948
  - anatomy, epidermis 1217
  - optical properties, Australia 6222
  - phenology, New Zealand 2010
  - waxes, indicator plants, air pollution, New Zealand 3754
- forest decline, air pollution, vehicles, Spain 1166

Pinus radiata *cont.*

- forest fires, simulation, Australia 4608
- forest influences
  - acid deposition, Spain 3671
  - hydrology, watersheds, New Zealand 2910
- forest litter
  - decomposition, Spain, phytotoxicity 7313
  - leaching, Spain 7911
  - measurement, decomposition, fungi, South Africa 294
- forest management, uncertainty, simulation, Chile 7828
- forest nurseries, herbicides, tolerance 8598
- forest plantations
  - birds, ecology, South Africa 3210
  - Chile 157
  - erosion, hurricanes, remote sensing, New Zealand 5200
  - forest influences
    - soil properties
      - Australia 1185
      - Chile 1185
      - New Zealand 1185
  - forests, multiple land use, species diversity, Spain 8407
  - growth models, forest management, New Zealand, development 4225
  - landslides, New Zealand 4940
  - phosphorus fertilizers, soil types, South Africa 126
  - rotations, economics, Australia 6247
  - site class assessment, statistical analysis, Argentina 225
  - site preparation, weed control, South Africa, botanical composition 9505
  - soil chemistry, Australia, carbon, nitrogen 7884
  - streams, water temperature, New Zealand 8376
  - thinning, Italy 945
  - watersheds, hydrology, New Zealand 8375-8376
- fungal diseases
  - *Armillaria*, New Zealand 4017
  - *Armillaria novae-zelandiae*, New Zealand 4860
  - *Cyclaneusma minus*, New Zealand 4872
  - *Diplodia pinea*, South Africa, hail damage, insect pests 7038
  - *Fusarium subglutinans*, USA 5645
  - *Fusarium subglutinans* f.sp. *pini*, USA, disease vectors 7400
  - *Melampsora medusae*, USA 5659
  - *Mycosphaerella pini*
    - Australia, disease vectors 6664
    - New Zealand 4872
  - USA, spread, imports 2303
- genetic transformation, tissue culture 5503
- genetic variation
  - bark, monoterpenoids, New Zealand 4824, 4826
  - fungal diseases
    - *Cyclaneusma*, New Zealand 4818, 4821
    - *Diplodia*, New Zealand 4818
  - heritability, clones, New Zealand 4820
  - increment, stem form, fungal diseases, New Zealand 4818, 4821
  - provenance trials, New Zealand 4817
  - seedling growth, stem form, New Zealand 4819
  - wood chemistry, oleoresins, New Zealand 4823
  - wood density, spiral grain, New Zealand 4822
- habit, internodes, site factors, New Zealand, simulation 3710
- hydrology, Australia 6370
- increment
  - distribution, South Africa, simulation 4384
  - phenology 5176

Pinus radiata *cont.*

- increment *cont.*
  - site preparation
    - slash
      - Australia 6119
      - soil chemistry, Chile 1750
- insect pests
  - *Conophthorus radiatae*, USA, disease vectors 7400
  - *Ernobius punctulatus*, USA, disease vectors 7400
  - *Ips grandicollis*, Australia, reviews 8337
  - *Rhyacionia buoliana*, Chile, integrated control 1501
  - *Sirex noctilio*, Australia, biological control 6660, 6664
  - USA, spread, imports 2303
- invasion, *Eucalyptus*, sclerophyllous forests, Australia 1414
- irrigation, sewage effluent, soil fauna, New Zealand 7938
- mammals, *Vombatus ursinus*, Australia 10063
- marsupials, *Wallabia bicolor*, browsing damage, seedlings 5823
- *Melampsora larici-populina*, USA 5659
- mycorrhizas, seedlings, radionuclides, uptake 4007
- nitrogen fertilizers
  - agroforestry
    - plant competition, New Zealand 1568-1569
    - plant nutrition, New Zealand 1568-1569
  - genetic variation, plant physiology, Australia 7752
- NPK fertilizers, nutrient deficiencies, soil types, South Africa 7073
- nutrient deficiencies
  - genetic variation, New Zealand 5293
  - magnesium, potassium, New Zealand 4542
  - remote sensing, colour photography 7664
- plant nutrition, whole tree logging, New Zealand, productivity 1135
- plus trees, cell walls, fracture, lignin 4814
- population genetics, isoenzymes, statistical analysis 5482
- provenance trials, increment, stem form, Chile 6027
- seed germination, forest fires, temperature, simulation 9774
- seedling growth, weeds, plant competition, New Zealand 4342
- seedlings, plant competition, pot experimentation 3867
- site class assessment
  - geographical information systems, statistical analysis, New Zealand 4402
  - increment, volume, soil types, Uruguay 1003
  - Italy, growth models, height, stand age 3486
- soil chemistry, Australia, aluminium, growth 3573
- soil fertility, forest litter, plant composition, Australia 5117, 5268
- soil organic matter, podzolic soils, carbon cycle, silviculture, Australia 4489
- soil properties, forest influences, New Zealand 8021
- stand characteristics, mortality, Italy 951
- stem form
  - genetic variation, plant nutrition, nitrogen 2949
  - volume, phosphorus fertilizers, Australia 5105
- thinning
  - experimental design, statistical analysis, New Zealand 5015
  - fertilizers, Australia 1708
- tissue culture
  - genetic variation 5094
  - micropropagation, genetic variation 5095
- tree breeding
  - early selection, basal area 8216

Pinus radiata *cont.*
- tree breeding *cont.*
  - genetic variation, New Zealand 4825
- urea fertilizers, New Zealand 1135
- volume, assortments, yield forecasting, South Africa, equations 216
- wildlife, birds, New Zealand 6670
- wood anatomy, tracheids, cell walls, genetic variation, New Zealand 3735

Pinus resinosa
- autecology, forest fires, North America 506
- container grown plants, nitrogen fertilizers, plant nutrition, hardening, plant water relations 4305
- controlled burning, forest management, Canada 4610
- crown, development, increment, spacing, Canada 1225-1226
- foliage, amino acids, temperature, photoperiod, seasonal variation 9842
- forest fires
  - roots, development, Canada 3866
  - seed germination, seedling growth, Canada 3866
- forest influences, throughfall, USA 2903
- forest litter
  - decomposition, USA 9703
  - soil fauna, USA 1924
- forest management
  - conferences 4171
  - yield forecasting, USA, sustainability 2523
- forest plantations
  - soil chemistry, nutrients, Canada 5358
  - spacing, crown, Canada, growth 4331
  - thinning
    - simulation, USA 8508
    - yield forecasting, growth models, Canada 5966
- forests, remote sensing, radar, backscatter, simulation 7677
- fungal diseases
  - *Armillaria ostoyae*
    - USA
      - population genetics 2261
      - population structure 9094
  - *Cylindrocladium scoparium*, seedlings, biological control 9124
  - *Heterobasidion annosum*, Canada 9101
  - *Lophodermium pinastri*, Canada 5657
- gas exchange, ground vegetation, soil biology, Canada 7128
- geographical distribution, climate, simulation, North America 2135
- growth models
  - climatic change, USA 8705
  - plant physiology 4208
- herbicide resistance
  - bilanafos
    - photosynthesis, plant nutrition 5138
    - plant morphology, seedling growth 5137
- insect pests
  - *Ips pini*, USA 7482
  - *Neodiprion sertifer*, defoliation 7490
  - Scolytidae, USA 5746
- leaf area index, measurement 4186
- mycorrhizas
  - *Laccaria bicolor*, population genetics, USA 9997
  - *Paxillus involutus*, genetic transformation 9078
  - site preparation, burning, Canada 7387
- nitrogen cycle
  - air pollution, nitrogen retention, USA 326
  - USA, measurement, nitrification 3621
- plant nutrition, nitrogen, seedling growth, mathematics 7078
- plant physiology, research 4684
- remote sensing, radar, USA, site factors 1040
- research, Canada 4247
- respiration, USA 5412

Pinus resinosa *cont.*
- roots, nutrient allocation, carbon, USA 7076
- site class assessment
  - equations, height, USA 217
  - increment, Canada 8702
  - stand density, USA 1839
- soil water, gas exchange, methane, USA 4503
- stand development
  - Canada, growth 4408
  - growth models, natural thinning 5963
- volume determination, equations 8695
- weed competition, grasses, planting, USA 6123
- weed control, USA 8645
- wildlife, forest management, Canada 4906
- yield forecasting, economic analysis, USA, computer techniques 4229

Pinus rigida
- air pollution, tolerance 7083
- arthropods, forest ecology, USA 7420
- cones, processing, seed germination, USA 8572
- degraded forests, forest decline, urban areas, Korea Republic 9312
- dendroclimatology, stand characteristics, increment, USA 6763
- dwarfism, witches' brooms, morphogenesis 6397
- fungal diseases, damping off, seed germination, seedling growth, acid deposition 10004
- landscape, forest fragmentation, USA 7280
- mycorrhizas, *Pisolithus tinctorius*, plant competition, USA 9995
- natural regeneration, forest fires, soil chemistry, USA 381
- nitrogen cycle, USA, measurement, nitrification 3621
- progeny testing, increment, height, USA 4832
- shoots, morphology 2934
- thinning, photointerpretation, stand structure, equations 8655

Pinus roxburghii
- biomass production, cycling, India 3864
- establishment, eroded soils, nitrogen-phosphorus fertilizers, mulching, India 130
- forest management
  - India 2719
  - planning, sustainability, India 1010
- forest plantations, soil biology, India, seasonal variation 7940
- forests
  - deforestation, synecology, ground vegetation 535
  - grazing, fodder, production, India 682
  - soil biology, forest litter, respiration, India 6294
  - synecology, stand structure, natural regeneration, India 2167
- fungal diseases, *Fusarium solani*, biological control 2292
- India, books 751
- mixed forests, synecology, topography, India 7269
- nitrogen-phosphorus fertilizers, soil properties, India 882
- seed germination, fumigants, phostoxin, phytotoxicity 5781
- seed testing, radiography, techniques 2488
- shoot cuttings, India 99
- soil chemistry, humic acids, soil fertility, India 286

Pinus rudis, taxonomy 7241

Pinus sabiniana, volatile compounds, USA 3740

Pinus serotina, plant nutrition, phosphorus, hypoxia 2846

Pinus sibirica
- boreal forests, natural regeneration, Russia, simulation, management 9965
- forest plantations, stand characteristics, Russia 5168
- genetic variation, isoenzymes, growth rings, Russia 8193

Pinus sibirica *cont.*
- genetics, isoenzymes, polyembryony, Russia 8223
- liberation felling, crown, development, Russia 9518
- population genetics, synecology, Russia 4755
- shoots, development, morphology 3728
- stem form, taper, volume determination, equations 7815

***Pinus* (Southern)**
- birds, *Picoides borealis*, USA, management 3209
- forest plantations, short rotation forestry, wood properties, USA, conferences 2459
- geographical information systems, hydrology, biomass production, USA 2506
- growth models, USA 802
- insect pests
  - *Dendroctonus frontalis*
    - USA
      - distribution 4889
      - spread 653
- provenance trials, climatic change, adaptation, temperature, simulation 1660

Pinus strobiformis, population dynamics, increment, USA, equations 9962

Pinus strobus
- acid deposition
  - cycling
    - biomass, Japan, sulfur 6311
    - Japan, sulfur 6312
- air pollution
  - fluorides, biochemistry 6349
  - ozone
    - carbon dioxide enrichment, foliage, optical properties 9749
    - photosynthesis, methodology 3658
  - tolerance 7083
- bark, thickness, fire resistance, USA 1197
- cones, production, gibberellins, Canada 9855
- controlled burning, forest management, Canada 4610
- deer, *Odocoileus virginianus*, Christmas trees, USA 4370
- dwarfism, witches' brooms, morphogenesis 6397
- farm forestry
  - investment, economic analysis, USA, computer techniques 37
  - USA, investment, economic analysis, computer techniques 37
- foliage
  - air pollution, USA, reviews 2872
  - optical properties, remote sensing 1256
  - RNA, isolation, techniques 5499
- forest ecology, plant succession, plant competition, USA 7312
- forest inventories, volume, Canada 4383
- forest litter, Japan, leaf fall, seasonal behaviour 7899
- forest management
  - conferences 4171
  - logging, Canada 4420
- fungal diseases, damping off, seed germination, seedling growth, acid deposition 10004
- genetic variation
  - isoenzymes, population genetics, Canada 3983
  - plant morphology, Canada 8197
- growth models, USA 8509
- improvement fellings, Canada 4354
- increment, simulation, USA 7676
- insect pests
  - *Hylobius pales*, antifeedants 5736
  - *Lymantria dispar*, carbon dioxide enrichment, plant composition 5711
  - *Pissodes strobi*
    - biology 5749
    - Canada 5750
    - USA 924
- light, soil water, increment, USA 5181
- lignification, enzyme activity 1275

Pinus strobus cont.
- mycorrhizas
  - *Laccaria bicolor,* photosynthesis 4849
  - site preparation, burning, Canada 7387
- palaeoecology, North America 8151
- plant genetic resources, conservation, forest management 4815
- plant nutrition, soil fertility, forestry practices, Canada 7793
- plant parasitic nematodes
  - *Bursaphelenchus xylophilus*
    - resistance
      - histology 5776
      - plant physiology 5777
- plant physiology, research 4684
- plant water relations, dielectric properties 785
- population genetics, isoenzymes, Canada 5491
- research, Canada 4247
- seed dispersal, wind, seed germination 479
- seed treatment, chemistry, messenger RNA, proteins 74
- seed trees, natural regeneration, stand characteristics, USA 3094
- seedlings, roots, Canada, morphology 9784
- shelterwood system, Canada 4316
- silviculture, plant nutrition, translocation, Canada 6324
- site preparation, controlled burning, plant physiology, USA 1270
- stand characteristics, USA 5445
- weed control, cleaning, USA, growth 2651
- wildlife
  - forest management, Canada 4906
  - *Microtus pennsylvanicus,* plant succession, USA 5811
- wood chemistry, carbon, water stress, USA 7660

Pinus sylvestris
- acid deposition
  - foliage, growth, morphology, Finland 3647
  - plant nutrition, growth, Finland 7098
  - seasonal variation, estimation, Netherlands 3655
  - throughfall, chemistry, Bulgaria 7982
  - watersheds, hydrology, Finland, acidification 6333
- advance growth, growth models, height, Finland 6971
- afforestation
  - Germany, carbon cycle 8866
  - peatlands, forestry practices, climate, Sweden 6112
  - soil chemistry
    - Germany 9764
    - UK 5353
  - spacing, tree breeding, Sweden 9974
- age, photosynthesis, crown, light, Poland 1278
- air pollution
  - amenity and recreation areas, increment, Belarus 6326
  - ammonia
    - biochemistry 3645
      - Germany 8847
    - Germany 7104
  - climate, Finland, measurement 5324
  - deposition, leaf conductance, Sweden 7991
  - fluorides, foliage, damage, Norway 5330
  - fly ash, Germany 4188
  - foliage
    - antioxidants, Germany 6337, 6355
    - chemistry
      - Slovakia 9745
      - TCA, Finland 338
    - forest decline, Finland 7092
  - forest decline, Poland 2873
  - increment 1971
    - dendrochronology, Poland 7612
  - ozone
    - molecular genetics 4566
    - nutrient deficiencies, nutrition physiology 5326

Pinus sylvestris cont.
- air pollution *cont.*
  - photosynthesis
    - Belarus 6352
    - carbon dioxide, Russia 2886
    - Russia 6335
    - water stress, Russia 9751
  - plant composition, Russia 4568
  - plant nutrition
    - Russia 7094
    - throughfall, Netherlands, nitrogen 5318
  - Poland, mapping, monitoring 1153
  - Russia
    - fluorine, damage 1962
    - monitoring 9740
  - soil chemistry
    - Netherlands, nitrogen, sulfur 3665
    - soil biology, Netherlands, nitrogen 5318
    - Sweden, nitrates, soil solution 5246
  - sulfur dioxide
    - biochemistry, enzymes, Germany 2883
    - foliage, Germany 5315
    - gas exchange, Finland, simulation 6351
  - throughfall, soil chemistry, Sweden, nitrates 5245
  - tolerance 7083
  - UK
    - foliage
      - leaching 4560
      - microbial flora 4570
      - nutrients 4559
    - fumigation equipment 4189
    - growth 4558
    - metabolism 4562
    - research 4574
- amelioration of forest sites, fertilizers, Germany 8592
- assimilation, seasonal variation, Germany 3006
- bark
  - air pollution, sulfates, Europe 8848
  - chemistry, esters 1253
  - edible species, cooking, palatability 1810
- basal area, measurement, sample plot technique, Poland 993
- biomass distribution, root shoot ratio, seasonal variation 5183
- biomass production, climate, simulation, Finland 3488
- birds
  - *Tetrao urogallus*
    - foliage, browse, Norway 4056
    - UK 688
- boreal forests
  - natural regeneration, Russia, simulation, management 9965
  - soil properties, mineralogy, Finland 9685
- branches
  - evapotranspiration
    - stand density
      - Europe 7146
      - Russia 7146
- buds
  - phenology, climatic change, provenance trials, Finland 2009
  - plant physiology, seasonal variation, genetic regulation, genetic transformation 5404
- cambium, enzymes, proteinases, wood anatomy, cell differentiation 9854
- canopy
  - light
    - natural regeneration
      - Finland
        - seedling growth 9664
        - simulation 9664
  - radionuclides, fallout, caesium, Finland 1955
- carbon cycle, Germany 8866
- carbon dioxide enrichment
  - air pollution, ozone, seedling growth 2874
  - nitrogen cycle, ammonia 1966
- cell cultures, metabolites, stilbenes 3762

Pinus sylvestris cont.
- chloroplast genetics 8219-8220
- choice of species, protection forests, avalanches, Germany 6869
- Christmas trees, progeny testing, USA 2668
- chromosomes, Russia, karyotypes 8194
- clear felling, soil chemistry, Sweden, nitrogen, leaching 7044
- climate, plant morphology, water stress, UK 5222
- climatic change
  - carbon dioxide enrichment, photosynthesis, Finland 7861
  - frost resistance, Finland, simulation 5231
- coniferous forests
  - clear felling, synecology, Estonia 1363
  - climatic change, UK 2794
  - nitrogen fertilizers
    - streams
      - Sweden
        - aquatic animals 9458
        - water quality 9458
  - synecology, Germany 7282
- container grown plants, irrigation, water availability, growth 6077
- crown
  - age, Russia 4388
  - thinning, Finland, simulation 8649
- cycling
  - biomass production, Finland 7960
  - sulfur, air pollution, UK, methodology 3629
- deer
  - *Alces alces*
    - browse, Sweden 10069
    - browsing, Sweden, simulation 10071
    - browsing damage, Finland 7519
  - *Cervus dama,* Poland, damage, assessment 4049
  - *Cervus elaphus,* grazing effects, forest ecology, UK 2392
- defoliation
  - branches, foliage, increment, Finland 8892
  - shoots, growth, Finland 2959
- dendrochronology
  - autecology, Spain 1592
  - bogs, British Isles 9315
  - Spain 6766
  - Sweden 5916
- dendroclimatology, water stress, Germany 10159
- denitrification, nitrogen cycle, Europe, measurement 3575
- direct sowing, seedling emergence, soil water, site preparation, Sweden 6111
- drainage, growth models, Finland 5182
- drought
  - foliage, plant anatomy 6296
  - plant growth regulators 4518
- dunes, plant succession, microclimate, Netherlands 1401
- early selection, resins, yields 8200
- edible fungi, *Morchella,* Spain, ecology 2677
- embryology 7169
- enzymes, chloroplast genetics 5416
- epiphytes, air pollution, indicator plants, Sweden 6334
- fertilizers
  - calcium ammonium nitrate, foliage, ultrastructure, Finland 7079
  - Carabidae, Poland 7416
  - clear felling, soil chemistry, denitrification, Sweden 1095
  - Finland, nutrients, availability 7762
  - foliage, chemistry, Finland 4297
  - increment, plant composition, peatlands, Finland 6068
  - lime, ground vegetation, Germany 8591
  - nitrogen cycle
    - isotope fractionation, Sweden, methodology 2490
    - water stress, methodology 7646

***Pinus sylvestris** cont.*
flowering
  induction
    Poland, pruning, gibberellins 1317
    seed orchards, Germany 6511
foliage
  air pollution
    cuticle, waxes 2045
    diffusion models 4565
    heavy metals
      Argentina 4555
      Germany 4555
    organochlorine compounds, Germany 4556
    plant physiology 3789
    pulp and paper industry, Finland 5314
  chemistry
    air pollution, indicator plants, Sweden 1152
    esters 1253
  damage, air pollution, fluorides, Norway 5331
  distribution, light, plant competition 2950
  endophytes, acid deposition, Finland 2226
  enzymes
    glutamate dehydrogenase, air pollution, Germany 6479
    isoenzymes 3766
  Finland, chemistry, polyamines 6452
  life tables, Sweden 8056
  major elements, Finland 5396
  measurement, canopy, insolation, Poland 3474
  morphology, chemistry, site class assessment, Sweden 3745
  pesticide residues, Europe 5343
  plant nutrition, air pollution, UK 6453
  roots, microbial flora, Poland 7382
  shedding
    forest health, UK 1301
    plant nutrition, nitrogen, Sweden 4528
  shoots
    light
      Finland 2035
      Sweden 2035
  stress, ethylene, biosynthesis 5409
  waxes
    air pollution, damage, Poland 1227
    stomata, dry deposition 8841
  weight, canopy, insolation, Poland 3475
forest borders, air pollution, deposition, Netherlands 6345
forest decline
  foliage, cuticle, permeability, Germany 2089
  France, insect pests, fungal diseases 3815
  genetic variation, Europe 6583
  Germany 6505
  increment, Austria, simulation 7202
forest fires
  Finland, mortality 8032
  natural regeneration, age of trees, Sweden, history 3064
forest health
  air pollution, Russia, Finland, monitoring 9858
  UK, forest decline 6501
forest influences
  forest economics, peatlands, carbon cycle, Norway 2784
  understorey, air pollution, Russia 341
forest litter
  decomposition
    air pollution, Poland 7050
    carbon, nitrogen, mineralization 6284
    nutrients, heavy metals, Sweden 9700
    Poland, chemistry 7901
    site factors, climate, Sweden 4495
    Spain 9699
    Sweden 6281
      mathematical models 9701

***Pinus sylvestris** cont.*
forest litter *cont.*
  foliage
    measurement
      biomass production
        Europe 7902
        Spain 7902
      climate
        Europe 7902
        Spain 7902
  fungi, Germany, ecology 3143
  Sweden, chemical composition 4494
forest management, site class assessment, Ukraine 5185
forest nurseries
  container grown plants, growing media, irrigation, Finland 3422
  frost protection, Sweden 5120
  NPK fertilizers, nutrient uptake, nitrogen 4306
forest plantations
  beating up, increment, plant morphology, Sweden 9529
  biomass, distribution, site types, Russia 232
  fertilizers, soil types, Russia 5108
  forest influences, soil properties, Europe 1185
  forest litter, decomposition, Spain 7915
form factors, diameter, height, Poland 994
frost injury, increment, phenology, climatic change, simulation 7040
frost resistance 7039
  acclimatization
    measurement 3013
    photosynthesis 1886
  altitude, latitude, Sweden 5233
  roots, Russia 279
fungal diseases
  Ascomycotina, water stress, France 1934
  Cronartium flaccidum, tissue cultures, disease resistance 9112
  Diplodia pinea
    Netherlands 1453
    resistance, screening 8294
  disease vectors, *Hylobius abietis* 5757
  Endocronartium pini
    Finland 4022
      disease vectors, insect pests 5752-5753
    UK, inoculation, infection 9119
  forest nurseries, Finland 5619
  Gremmeniella abietina 4169
    acid deposition 8304
    air pollution, Europe, damage 9118
    Finland 5639-5640, 10010
      insect pests, pest resistance 660
    pollution 9117
    stand density, Finland 1461
  Heterobasidion annosum
    Poland, resistance, natural regeneration 1454
    resistance, enzymes 5628
    roots, decay, anatomy 7396
    UK, damage 9099
  Leptographium procerum, France, damage 3165
  Lophodermella sulcigena, Finland, detection 7663
  Phacidium infestans, mortality, stand density 5665
  seeds, pathogenicity 9088
fungi, Norway, relationships, layer structure 9990
genetic variation
  chemotaxonomy, Russia 2181
  habit, Germany 8209
  inbreeding depression, conservation 5480
  isoenzymes
    Bulgaria 561
    gene flow
      Belarus 571
      Latvia 571
      Russia 571
      Ukraine 571

***Pinus sylvestris** cont.*
genetic variation *cont.*
  isoenzymes *cont.*
    growth rings, Russia 8193
    USSR 5514
  plant morphology 8199
  population genetics
    Europe 572
    Russia 572
    Turkey 572
  terpenoids 5397
girdling, wood properties, resinous wood, Sweden 3682
global warming, provenance trials, increment, Finland 2791
ground vegetation
  allelopathy, natural regeneration, seed germination, Sweden 9913
  amelioration of forest sites, Germany 8166
  synecology, species diversity, Spain 3942
groundwater, increment, Germany 4524
growing stock, stand structure, Finland, volume, increment 4397
growth, photosynthesis, altitude, treelines, UK 2807
growth models
  climatic change, USA 8705
  climatic factors 7821
heathlands, agroforestry, tourism, France 5879
height, wood properties, Poland, equations 3681
humus, soil chemistry, ground vegetation, plant succession, Netherlands 6280
increment 1007
  composts, wood residues, Australia 7763
  diameter
    air pollution, Russia 4569
    Finland 9584
  fallout, Ukraine 4548
  height
    growth models, Germany 6185
    Russia, stand density 4410
  urea, thinning, Sweden 3487
  variation, thinning, selection criteria, Germany 999
  volume, plant nutrition, Sweden 6182
inheritance, random amplified polymorphic DNA 8221
insect pests
  Bupalus piniarius
    air pollution
      pest resistance, Germany 8335
      plant composition, Germany 8335
    Germany, damage 4883
  Cinara pini, Europe, taxonomy 630
  Coleoptera
    Germany 2355
    Norway, distribution 2350
    snow damage, Sweden, susceptibility 10045
    Sweden, interactions, *Thanasimus formicarius* 7485
  Curculionidae, Sweden 3435
  Diprion pini
    France
      foliage, taxifolin 4667
      resistance, biology 627
  Diprionidae, Finland, foliage, monoterpenes 2367
  Gilpinia pallida, resistance, provenance trials, Finland 10049
  Graellsia isabellae, France, resistance, biology 627
  Hylobius abietis
    disease vectors 5757
    feeding behaviour 5759
    forest plantations
      Finland
        models 10043
        survival 10043
      France, disease vectors, *Leptographium procerum* 3165
    shelterwood system, Sweden 4041
    Sweden, control 10054

***Pinus sylvestris** cont.*
- insect pests *cont.*
  - *Hylobius radicis,* Canada, damage 7484
  - Hymenoptera, Poland, chemical control 7499
  - *Lygus rugulipennis,* seedlings, damage 1478
  - *Microdiprion pallipes,* Sweden 9173
  - *Monochamus sutor,* plant parasitic nematodes 1495
  - *Neodiprion sertifer*
    - Austria, pheromone traps 5791
    - Czech Republic, pheromone traps 5763
    - resistance, provenance trials, Finland 10049
    - Russia, population dynamics, spatial distribution 10050
    - Sweden, control 7504
  - *Panolis flammea,* Russia, damage 4885
  - *Pissodes piniphilus,* Finland, disease vectors, *Endocronartium pini* 5752-5753
  - Poland, foliage, damage, assessment 4030
  - *Rhyacionia buoliana,* Ukraine, population dynamics 7450-7451
  - *Schizolachnus pineti,* air pollution, ozone, plant composition 4035
  - Scolytidae
    - France, disease vectors 1934
    - USA 5746
      - interspecific competition 7470
  - *Thecodiplosis brachyntera,* Europe 5769
  - *Tomicus piniperda*
    - Finland, fungal diseases, damage 660
    - pruning, Sweden, resistance 3183
    - Sweden
      - control
        - natural enemies 2383
        - traps 2383
    - USA, control 9195
- insects, honeydew, production, Germany 8681
- isoenzymes
  - gene mapping
    - Belarus 9044
    - Latvia 9044
    - Russia 9044
    - Ukraine 9044
  - Ukraine, radiation 5484
- leaf area index, Sweden, measurement, equipment 1610
- lichens
  - air pollution, aluminium, Finland 8843
  - indicator plants, air pollution, Norway, distribution 1390
  - Russia, plant succession, fire 8170
- light
  - Finland, variation, measurement 8867
  - shade, photosynthesis, simulation 9662
- lignification, growth effects 4711
- liming, roots, soil chemistry, Sweden 9460
- mitochondria, enzymes 5414
- mixed forests
  - natural regeneration, synecology, Poland 8179
  - synecology, plant succession, Poland 2164
- mixtures
  - increment, Finland, simulation 3462
  - *Larix sibirica,* root systems, plant competition, Russia 2656
- molecular genetics, enzymes 5505
- mountain forests, Spain 2133
- mycorrhizas
  - *Cenococcum geophilum,* seedlings, nitrogen fertilizers 7392
  - chemistry 8274
  - enzymes, ammonium, metabolism 4003
  - foliage, extracts, allelopathy 2245

***Pinus sylvestris** cont.*
- mycorrhizas *cont.*
  - *Hebeloma cylindrosporum,* seedlings, plant growth regulators, IAA 2246
  - *Laccaria bicolor,* plant growth regulators, plant nutrition 3159
  - *Laccaria laccata*
    - development
      - seedlings
        - *Frankia* 7388
        - soil bacteria 7388
    - heavy metals, toxicity 5601
  - *Lactarius,* host specificity 5572
  - Netherlands 9074
  - *Paxillus involutus,* plant nutrition, nitrogen 5604
  - *Pisolithus tinctorius,* carbon dioxide enrichment 7390
  - *Rhizopogon vinicolor*
    - development
      - seedlings
        - *Frankia* 7388
        - soil bacteria 7388
  - succession, UK 8280
  - *Suillus bovinus*
    - plant nutrition 5581
      - nitrogen 5604
  - *Suillus variegatus,* heavy metals, toxicity 5601
  - Sweden 8259
  - *Thelephora terrestris,* heavy metals, toxicity 5601
- natural regeneration
  - advance growth
    - mortality, Sweden 3435
    - Sweden 3436
  - artificial regeneration, wood properties, increment, Sweden 7120
  - clear felling, Sweden 3439
  - damage, deer, fungal diseases, Finland 10061
  - disease resistance, *Heterobasidion annosum,* Poland 1454
  - light, Spain 926
  - plant succession, Russia 1400
- natural thinning
  - Finland, mathematical models 9959
  - stand characteristics, Sweden 3460
- nature conservation, UK 5893
- nitrogen fertilizers
  - nitrogen cycle, Sweden 4295
  - nutrient uptake, Russia 3409
  - understorey, Sweden 2611
- NPK fertilizers, plant nutrition, Russia 7757
- nutrient deficiencies
  - magnesium, reviews 9732
  - nitrogen, foliage, chemistry, ultrastructure 8822
  - phosphorus, foliage, chemistry, ultrastructure 6322
- palaeoecology
  - Spain 8991
  - Sweden 3066
- peatlands
  - increment, plant nutrition, Sweden 9934
  - soil chemistry, drainage, Finland 3571, 9509
- photoperiodism, seedling growth, genetic variation 3972
- photosynthesis
  - acid deposition, plant growth regulators, benzyladenine 462
  - air pollution, damage, Finland, methodology 1259
  - chlorophyll 3788
  - light, temperature 3796
  - methodology 5946
  - plant nutrition, nitrogen, Finland, seasonal variation 8098
  - reviews, photoinhibition 5415
  - Russia, edaphic factors 4712
- plant competition, natural thinning, simulation 9362
- plant composition, DNA 438
- plant growth regulators
  - seed production, Russia 2073
  - shoots, growth, Russia 2074

***Pinus sylvestris** cont.*
- plant morphology
  - habit, taxonomy, Poland 1322
  - Russia 4657
- plant nutrition
  - crown, foliage, age, Finland 3622
  - foliage, waxes, morphology 1129
  - nitrogen
    - mycorrhizas, seeds 2493
    - seedling growth
      - mathematics 7078
      - mycorrhizas, enzymes 1140
  - nitrogen metabolism, air pollution, Netherlands 5290
- plant parasitic nematodes
  - *Bursaphelenchus mucronatus,* vectors 1495
  - *Bursaphelenchus xylophilus,* USA 9180
- plant physiology, biochemistry, stress factors, research 6494
- plant succession
  - dunes, Netherlands 9952
  - humus, development, Netherlands 5260
  - seral stages, Greece 541
- plant water relations 4526
  - cavitation 2841
  - Italy 3615
- planting stock
  - bare rooted stock
    - grading
      - Finland
        - morphology 9471
        - variation 9471
      - morphology, quality, Finland 902
  - storage, temperature, frost resistance 6087
- plus trees
  - crown, tree breeding, phenotypic selection, Finland 7345
  - progeny testing, Russia 9043
- pollen
  - development, Finland, forecasting, heat sums 9872
  - Finland, viability, seasonal variation 9874
  - gene flow, Sweden 5509
  - genetic variation, Sweden 6588
  - seasonal variation, Finland 2112
- pollen germination, air pollution, Slovakia 7212
- pollination, seed orchards, Sweden 3134
- population genetics
  - cones, variation, Poland 7349
  - foliage, variation, Poland 7350
  - habit, Poland 9975
  - isoenzymes
    - Spain 2185
    - Switzerland 5489
  - Russia 2180, 5486
- potassium fertilizers, increment, plant nutrition, Finland 129
- progeny testing, sampling, Finland 7674
- provenance, bark, monoterpenes, variation, Poland 1427
- provenance trials
  - air pollution, increment, Poland 6030
  - experimental design, plant competition, increment, Sweden 9415
  - Finland
    - insect pests
      - resistance
        - *Gilpinia pallida* 10049
        - *Neodiprion sertifer* 10049
  - Germany 7719, 9424
  - IUFRO, Europe 831
  - mortality, Sweden 3368
  - Netherlands 826
  - Poland 837, 3365
    - age, site factors 828
  - Spain 7719
- pruning
  - increment, diameter, Finland, simulation 3455
  - knots, wood properties, diameter, Poland 1983
  - selection methods, work study, Poland 6130
- radionuclides, fallout, soil pollution, Germany, movement in soil 8830

Pinus sylvestris *cont.*
- reaction wood, plant growth regulators, IAA 4659
- reclamation, Russia 3228
- regeneration surveys, Finland 7777
- remote sensing
  - diameter, Norway 9629
  - radar, biomass, Finland 3517
  - reflectance, variation, Scandinavia 7845
  - Sweden, solar radiation 1859
- reproductive behaviour, crown, forest decline, UK 3033
- resin tapping
  - scars, microbial flora, fungi, Poland 1441
  - wood properties, quality, research, Poland 1984
- root exudates, soil chemistry, Russia 4604
- roots
  - air pollution, Sweden, soil, distribution 5319
  - dendrochronology, Germany 6760
  - development, morphology, genetic engineering, *Agrobacterium rhizogenes* 3133
  - distribution, soil types, statistical analysis, Kazakhstan 6408
  - dynamics, cycling, peatlands, Finland 407
  - frost resistance, planting stock, cold storage 3558
  - lenticels, plant water relations 2942
  - nutrient uptake
    - magnesium
      - measurement 9726
      - techniques 9726
  - stumps, decay fungi, Sweden 9989
  - testing, Sweden, tetrazolium compounds 1885
- salt injury, roadside plantations, foliage, chemistry, Finland 348
- sap flow, resin tapping, Germany 7067
- sapwood
  - foliage, plant water relations, climate, Europe 5284
  - triacylglycerols, sterol esters 2984
- seed aging, genetic variation, testing 2564
- seed banks, Russia 9937
- seed cleaners, design 960
- seed germination
  - enzymes, isoenzymes, superoxide dismutase 6480
  - forest fires, temperature, simulation 9774
  - seed treatment, seedling growth 852
  - seedling growth, allelopathy, plant extracts, *Pteridium aquilinum* 5464
- seed maturation
  - seed collection, Sweden, radiography 3382
  - seed treatment, Sweden 6037
- seed orchards
  - fertilizers, flowering, seed production, Finland 5063
  - genetic variation, isoenzymes, population genetics, Poland 1426
  - latitude, Finland 7731
  - pollination
    - Sweden, management 9875
    - tree breeding, Sweden 5500
- seed treatment
  - lasers 853
  - seedlings, photosynthesis 5064
- seedling growth
  - acid deposition, soil organic matter, field tests, Poland 1958
  - plant growth regulators 463, 1268-1269
  - plant nutrition, nitrogen, foliage 444
  - root zone temperature 6275
  - weeds, allelopathy, plant competition, Sweden 1759
- seedlings
  - air pollution
    - sulfur dioxide
      - foliage
        - damage 1164

Pinus sylvestris *cont.*
- seedlings *cont.*
  - air pollution *cont.*
    - sulfur dioxide *cont.*
      - foliage *cont.*
        - phenolic compounds 7086
        - physiology 8107
  - chlorophyll, synthesis, light 1276
  - enzymes
    - gene expression, light 3973
    - induction, plant nutrition, light 1285
  - ozone, messenger RNA, induction 8185
  - phenolic compounds, respiration, phytotoxicity, metal ions 7189
  - phytotoxicity, aluminium, biochemistry 7188
  - roots, plant physiology, outplanting 3802
  - stems, dormancy, bending, stresses 2937
- seeds
  - imbibition, seed morphology, provenance, Finland 6400
  - mechanical properties, testing 405
  - plant growth regulators 1269
- seral stages, Russia 4795
- shelterwood system
  - microclimate, Sweden, radiation 3428
  - natural regeneration
    - microclimate, Sweden, monitoring, equipment 9333
    - site preparation, Poland 6918
- shoots
  - development, plant nutrition, genetic variation 3717
  - Germany, emission, hydrogen sulfide 8099
  - structure, photosynthesis, light, carbon dioxide 8109
  - weight, canopy, insolation, Poland 3475
- silvicultural conversion
  - broadleaves, Germany 4322
  - Germany 6132, 9501
  - mixtures, Austria 6940
  - thinning, Germany 9498
- silvicultural systems
  - history, Germany 915
  - selection system, stand characteristics, Germany 6132
- silviculture
  - genotypes, wood properties, reviews 8008
  - Germany, conferences 5940
- site class assessment
  - drainage, Russia 231
  - Finland 6969
  - site factors, mathematics, Russia 5187
  - soil chemistry, topography, Sweden 2708
  - understorey, botanical composition, Finland 9590
- site preparation
  - slash, cycling, Sweden 3445
  - stand establishment, increment, Sweden 9504
- site types, vegetation types, Germany 4769
- slash, France, disposal, costs 6928
- soil biology, carbon dioxide enrichment, Finland 7935
- soil chemistry
  - nitrogen, aspect, Spain 7889
  - weathering, UK 1904
- soil organic matter
  - dissolved organic matter, Netherlands 1907
  - sorption, halogens, Sweden 8777
- soil pollution, Russia, heavy metals 1920
- soil properties, climate, Sweden 9683
- soil toxicity, aluminium, plant nutrition 6310
- soil types, soil properties, Denmark 1085
- soil water, chemistry, Finland 7879
- spacing, increment, stem form, Finland 6937
- species diversity, environmental factors, Spain 5449

Pinus sylvestris *cont.*
- squirrels, *Sciurus,* UK, competitive ability 2389
- stand characteristics
  - botanical composition, Belarus 1364
  - ground vegetation, roots, biomass production, Finland 7152
  - plant competition, yield tables, simulation 6827
- stand density
  - forestry practices, stem form, Belarus 5156
  - Germany 2687
- stand development
  - light, Russia, simulation 7792
  - plant competition, Switzerland, growth, variation 3884
- stand structure
  - genetic variation, resin tapping, Russia 197
  - increment, Belgium, forest management 6941
  - natural regeneration, Sweden 7260
- stem form, taper, volume determination, equations 7815
- synecology
  - ground vegetation, UK, lichens 1359
  - species diversity, Sweden, simulation 5965
- taxonomy, plant morphology, habit, Poland 2114
- thinning
  - drainage, forest economics, simulation 9521
  - fertilizers, wind damage, snow damage, Sweden 3560
  - Germany 9526
  - nitrogen fertilizers, forest economics, Russia 9517
  - selection criteria, Russia 2652
  - stand characteristics, Sweden 9520
- tissue culture
  - genetic transformation 4833
  - organogenesis, mycorrhizas, *Hebeloma cylindrosporum* 1691
- transpiration
  - climatic change, simulation, Sweden 4516
  - sap flow, Sweden 7061
- tree breeding
  - Germany 4230
  - phenotypic selection, genetic gain 9049
  - progeny testing
    - frost resistance 3131
    - heritability, Finland 9973
  - selection criteria, ideotypes 7353
- underplanting, Poland, broadleaves 3461
- understorey
  - fertilizers, roots, Norway 7751
  - *Quercus,* silviculture, Germany 925
- ungulates, forest management, national parks, Poland 4058
- vegetation types, history, UK 510
- volume, increment, bark, Spain, equations 5961
- volume determination
  - equations, forest inventories, Finland 7814
  - remote sensing 1034
- volume tables, Italy 8694
- water stress, Germany 2833
- water uptake, Sweden, tracers 8814
- waterlogging, foliage, plant anatomy 6296
- watersheds
  - hydrology
    - cycling, cations, Spain 8377
    - UK, research 702
- weed control, Finland 7785
- wildlife
  - *Alces alces,* browse, forests, Poland 7535
  - forest borders, clear felling, Sweden 5810
- wind damage
  - Netherlands 1062
  - simulation, Finland 6822
- wind resistance, bending, Finland 7033

Pinus sylvestris cont.

- wood anatomy
  - foliage, weight, climate, correlation 8058
  - rays, grain and figure 389
  - reaction wood 2016
- wood chemistry
  - esters 1253
  - trace elements, extractants, air pollution, Germany 9843
- wood properties
  - growth effects, Russia 9756
  - vegetation types, Poland 4596
- yield forecasting
  - groundwater, Belarus 8714
  - remote sensing, simulation, Estonia 1866

Pinus tabulaeformis

- chloroplast genetics, hybrids, taxonomy 9048
- forests, energy balance, evapotranspiration, China 8161
- fungal diseases, *Diplodia pinea* 10012
- seed germination, water stress 9426

Pinus taeda

- acid deposition
  - air pollution
    - ozone
      - soil enzymes
        - plant nutrition 9738
        - seedling growth 9738
- agroforestry, USA 9274
- air pollution
  - ozone
    - acid deposition
      - cycling 6347
      - soil chemistry, heavy metals 8003
    - biochemistry 3657
    - disease resistance, fungal diseases, *Gibberella fujikuroi* var. *subglutinans* 8831
    - water stress, increment, USA 7199
- apical meristems, cell division, methodology 780
- biomass
  - plant composition, USA 8708
  - remote sensing, satellites, USA 2762
  - roots, USA, measurement 8501
- birds
  - *Aimophila aestivalis,* forest management, USA, simulation 6990
  - *Picoides borealis,* USA, habitats 5179
- branches, crown, simulation, USA 6187
- breeding programmes
  - genetic diversity
    - theory 7358
    - USA 7358
- canopy, remote sensing, USA, reflectance, computer techniques 3525
- carbon dioxide enrichment
  - gas exchange, USA, adaptation 8752
  - photosynthesis
    - nutrient deficiencies 1881
    - plant nutrition, phosphorus 4696
  - plant physiology, USA 7024
  - roots, plant water relations, plant nutrition 9670
  - ultraviolet radiation, photosynthesis 2806
- cell culture, lignin, synthesis 8101
- container grown plants
  - weed control
    - USA
      - growth 1747
      - mortality 1747
- controlled burning, stand characteristics, forest recreation, USA 6378
- crown
  - growth models, volume 4219
  - thinning
    - fertilizers, USA 2011
    - simulation, USA 5148
- cycling, forest influences, USA 5355
- dead wood, arthropods, ecology, Australia 2297
- farm forestry
  - investment, economic analysis, USA, computer techniques 37

Pinus taeda cont.

- farm forestry *cont.*
  - USA, investment, economic analysis, computer techniques 37
- fertilizers
  - poultry manure, water quality 7765
  - split dressings, USA 9457
- flowering, seed orchards, USA, variation 9877
- foliage
  - basal area, USA, correlation 2927
  - climate, stand development, USA 6977
  - cycling
    - fertilizers, USA 2859
    - weed control, USA 2859
  - thinning, fertilizers, USA 2011
- forest decline, afforestation, mine spoil, USA 2092
- forest inventories, growth models, assessment, monitoring 6192
- forest litter, measurement, decomposition, fungi, South Africa 294
- forest management, USA, pulpwood 1784
- forest nurseries
  - pruning, frost resistance, USA 273
  - wrenching, frost resistance, USA 273
- forest plantations
  - crown, morphology, simulation 4218
  - plant competition, thinning, USA 2122
  - stand density, stand characteristics, increment, USA 947
  - understorey, species diversity, forest management, USA 1765
  - weed control
    - understorey, species diversity, USA 6124
    - USA 170
      - herbicides 3449
- fungal diseases
  - blue stain, USA, pathogenicity 7399
  - *Cronartium fusiforme*
    - forest nurseries, control 4025
    - plant composition, monoterpenoids, resistance 9107
    - silviculture, USA 10021
    - tree breeding, USA 7346
    - USA
      - assessment 3167
      - population genetics 2274
  - damping off, seed germination, seedling growth, acid deposition 10004
  - *Gibberella fujikuroi* var. *subglutinans,* air pollution, ozone, disease resistance 8831
- gas exchange, ozone, water stress 3002
- gene expression, cambium 5506
- gene mapping, wood density 5508
- genetic variation, acid deposition, ozone, seedling growth 1963
- genetics, recombination, sex 8208
- growing stock, stand density, USA 2639
- growth models
  - height, USA 5179
  - USA 802
- herbicides, phytotoxicity 2649
- hurricanes, USA, stems, damage 2900
- increment
  - distribution, South Africa, simulation 4384
  - stand development, simulation, USA 2707
- insect pests
  - *Dendroctonus frontalis*
    - attractants 655
    - insecticides, toxicity 5784
    - USA
      - control 8352
      - plant water relations 8338
  - Hemiptera, USA 7438
  - *Rhyacionia frustrana*
    - plant composition, host specificity 6451
    - USA, population dynamics 5728
  - seed orchards, USA, control 4045
  - *Sirex noctilio*
    - Argentina, control 1494
    - Brazil, parasitoids 2364

Pinus taeda cont.

- insecticides, carbaryl, degradation 9194
- leaf area index, techniques 5944
- light, measurement, techniques 270
- lignification 2019
- microclimate, clear felling, USA 5349
- mixed forests, roots, USA, distribution 6425
- molecular genetics 5493
  - enzymes, cinnamyl-alcohol dehydrogenase 8226
- mycorrhizas
  - *Pisolithus tinctorius*
    - carbon dioxide enrichment, phosphorus 6619
    - nutrition physiology 5585
    - photosynthesis, carbon dioxide enrichment 4696
- natural regeneration
  - forest litter, soil properties, USA 9912
  - site preparation, USA 4320
  - weed control, woody weeds, USA 1769
- natural thinning, USA, equations 3456
- nutrient allocation, ozone, simulation 1977
- ozone, nutrient allocation, stress factors, interactions 1975
- plant composition, seed orchards, USA, variation 9877
- plant nutrition, growth 7075
- plant parasitic nematodes
  - *Bursaphelenchus xylophilus*
    - resistance
      - histology 5776
      - plant physiology 5777
- plant physiology, simulation 3331
- plant succession, allelopathy, *Myrica cerifera,* light 7314
- plant water relations, plant competition, woody weeds, USA 1771
- planting stock, USA, floodplains 5127
- provenance trials
  - climatic change, adaptation, temperature, simulation 1660
  - South Africa 2553
- remote sensing
  - biomass, USA, soil water 1858
  - radar, biomass, USA 6227
- roots, morphology, carbon dioxide enrichment, nitrogen 6432
- rotations, forest economics, USA, simulation 6990
- scions, tree breeding, pollen, induction, techniques 9876
- seed development, enzymes, isocitrate lyase 6471
- seed dormancy, seed stratification, biochemistry, protein synthesis 2576
- seed longevity, storage 3381
- seedlings
  - air pollution, plant composition, biomass production, USA 1158
  - root systems, methodology 9332
- seeds
  - development, abscisic acid, embryogenesis 9849
  - enzymes, catalase 8113
- selection system, increment, USA 3480
- shelterwood system
  - microclimate, USA, equations 2787
  - plant water relations, microclimate, USA 5277
- shoot cuttings, auxins, genetic variation, rooting 5068
- short rotation forestry, increment, USA 2703
- silvicultural systems
  - microclimate, USA 922
  - natural regeneration, ground vegetation, USA 6099
  - stand characteristics, USA 7304
- silviculture, forest economics, USA, regeneration 954
- site class assessment
  - increment, volume, soil types, Uruguay 1003
  - simulation, USA 1823

***Pinus taeda** cont.*
  site preparation
    chemical treatment, forest economics, USA 1873
    herbicides, USA 3446
    plant competition, USA 3444
  soil chemistry, flooding, sea water, USA 1069
  spacing
    plant competition, USA, growth 1780
    USA, wood properties 4587
  species trials, USA 5053
  stand density
    logging, simulation, USA 3493
    wood properties 4593
  stems
    roots, mechanics 9797
    transpiration, respiration, carbon dioxide, measurement 1272
  stomata, light, plant physiology 7026
  thinning
    controlled burning, USA, mortality 176
    increment
      mechanization 3452
      USA 4355
    planning 3453
    USA 6128
      environmental impact 6935
      wood properties 4587
  tree breeding
    early selection
      USA, economics 3128
      wood density, USA 1430
    tissue culture, reviews 7737
  volume determination
    height, sampling 9348
    statistical analysis 8505
  volume tables, USA 6174
  water stress
    insect pests, resistance, interactions 8338
    plant competition, USA 166
  weed control, USA, herbicides 2649
  wind damage
    crown, USA, simulation 9680
    plant water relations, wood strength, USA 1061
  woody weeds
    control
      controlled burning, USA 6125
      herbicides, USA 6125
  yield forecasting, Zimbabwe, simulation 6830
Pinus taiwanensis, mycorrhizas, Taiwan 3158
Pinus tenuifolia (*see Pinus maximinoi*)
Pinus thunbergii
  chloroplast genetics 2193
  crown, Japan, dimensions, fractal geometry 9339
  diameter, increment, Japan 6973
  fertilizers, sewage, nitrogen cycle, runoff, Japan 3413
  forest influences, carbon dioxide, plant physiology, Japan 7025
  forest plantations, natural regeneration, site factors, Japan 7772
  genetic engineering, gene expression 5515
  genetic variation, isoenzymes, Japan, geographical distribution 4816
  genetics, isoenzymes, methodology 5501
  height, increment, Japan 6973
  insect pests
    Acanthocinus griseus, Japan, biology 6655
    Matsucoccus thunbergianae
      Korea Republic 7441
        monitoring, pheromone traps 5699
    Monochamus alternatus
      Japan
        biological control, entomogenous fungi 2377
        control 7480
    Thecodiplosis japonensis, East Asia 5769
  molecular genetics
    seed germination 3130
    seeds 3130

***Pinus thunbergii** cont.*
  photosynthesis, photosystem II, biochemistry 3004
  plant parasitic nematodes
    Bursaphelenchus, Japan, cavitation 2372
    Bursaphelenchus xylophilus
      host parasite relationships 5774
      Japan, damage, wood anatomy 2373
      plant water relations 8348
      resistance
        histology 5776
        plant physiology 5777
  pollen germination 2108
  seedlings
    acid deposition, simulation, growth, damage 8834
    soil toxicity, aluminium, growth 9709
  stand structure, Japan, multivariate analysis 9537
Pinus thunbergii × Pinus densiflora, insect pests, *Thecodiplosis japonensis,* endophytes, Japan 8252
Pinus tropicalis
  fungal diseases, *Ceratocystiopsis minima,* Cuba 1458
  insect pests, *Dioryctria horneana,* Cuba, oleoresins 5392
Pinus uncinata
  bogs, nature reserves, Germany 9930
  dendrochronology, autecology, Spain 1592
  edible fungi, *Morchella,* Spain, ecology 2677
  fungal diseases, *Endocronartium pini,* UK, inoculation, infection 9119
  increment
    diameter, climate, France 7860
    site factors, France 6968
  population genetics, isoenzymes, Switzerland 5489
  volume, increment, bark, Spain, equations 5961
  wetlands, nature conservation, France 3915
Pinus virginiana
  dwarfism, witches' brooms, morphogenesis 6397
  farm forestry
    investment, economic analysis, USA, computer techniques 37
    USA, investment, economic analysis, computer techniques 37
Pinus wallichiana
  cloud forests, synecology, altitude, land use, Nepal 1371
  earthquakes, growth rings, leaning stems, India 4605
  forest influences, atmosphere, India, terpenoids 266
  forests, synecology, stand structure, natural regeneration, India 2167
  fungal diseases, *Cronartium ribicola,* genetic resistance, progeny testing 5490
  insect pests, *Prociphilus himalayensis,* India, biology 2313
  roots, growth rings, variation 6416
  soil chemistry, humic acids, soil fertility, India 286
  tree breeding, progeny testing, Romania 5490
Pinus yunnanensis
  chloroplast genetics, hybrids, taxonomy 9048
  foliage, anatomy, epidermis 1217
  forest ecology, stand structure, vegetation types, China 3073
  insect pests, *Tomicus piniperda,* China 9169
  pollen germination, metabolic regulators 485
Pioneer species
  Betula, plant nutrition, Germany 2850
  Populus tremula, plant nutrition, Germany 2850
  Salix caprea, plant nutrition, Germany 2850
Pionus maximiliani, birds, seed predation, Brazil 1518

Piper aduncum, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Piper auritum
  seed germination, light, Mexico 3549
  seedlings, light, canopy gaps, crown, Mexico 7023
Piper chaba, bark, medicinal plants, Bangladesh, plant composition 9816
Piper guineense
  bark, extractives, bioassays 6444
  foliage, extractives, bioassays 6444
Piptostigma fugax, bark, chemistry, alkaloids 8915
Piranhea longopedunculata, species trials, reclamation, mined land, Venezuela 6711
Pisolithus
  Eucalyptus globulus, mycorrhizas, roots, enzymes 3155
  mycorrhizas
    Afzelia quanzensis, seedlings 9075
    Australia 8275
    broadleaves 5610
    Eucalyptus grandis, anatomy, host specificity 4006
Pisolithus tinctorius
  ectomycorrhizas, *Hopea,* Peninsular Malaysia, growth 3148
  mycorrhizas
    Acacia nilotica, seedling growth 8267
    Eucalyptus
      host specificity 5611
      seedlings, colonization 8281
    Eucalyptus globulus
      enzymes 8272
      infection, environmental factors 6615
      plant physiology 3771
      roots
        development, morphology 5573
        enzymes 3772
      symbiosis, molecular genetics 5570
    Eucalyptus grandis, biosynthesis, polypeptides 5579
    Leucaena leucocephala, seedling growth, plant physiology, plant nutrition 596
    Picea abies, seedlings, photosynthesis, seasonal variation 2249
    Pinus
      radionuclides, uptake 4007
      seedlings, infection 2247
    Pinus echinata, plant composition, fertilizers 4015
    Pinus elliottii, genetic variation 5598-5599
    Pinus halepensis 8285
      fertilizers, refuse, Spain 4002
      seedling growth, Spain 4844
    Pinus monticola, nutrition physiology 4000
    Pinus ponderosa, forest nurseries, Argentina 4009
    Pinus rigida, plant competition, USA 9995
    Pinus sylvestris, carbon dioxide enrichment 7390
    Pinus taeda
      carbon dioxide enrichment, phosphorus 6619
      nutrition physiology 5585
      photosynthesis, carbon dioxide enrichment 4696
    Quercus, morphology 6613
    Quercus rubra, plant growth regulators, planting stock 5594
Pisonia grandis, mycorrhizas, Basidiomycotina 5597
Pissodes, insect pests, *Pinus sylvestris,* Sweden 3435
Pissodes castaneus, insect pests, France, disease vectors, fungal diseases 3186
Pissodes piceae, insect pests, France, disease vectors, fungal diseases 3186
Pissodes piniphilus, insect pests, *Pinus sylvestris,* Finland, disease vectors, *Endocronartium pini* 5752-5753

- ***Pissodes strobi***
  - insect pests
    - conifers, Canada, integrated pest management 7497
    - *Picea*
      - Canada 5750
      - North America
        - biological control 680
        - parasitoids 680
    - *Picea omorika,* Canada, damage 651
    - *Picea sitchensis*
      - Canada, resistance 1490
      - pest resistance 5756
    - *Pinus*
      - North America
        - biological control 680
        - parasitoids 680
    - *Pinus banksiana*
      - Canada 2359
        - control 9186
    - *Pinus strobus*
      - biology 5749
      - Canada 5750
      - USA 924
- ***Pissodes terminalis,*** insect pests, *Pinus contorta,* biology 8342
- ***Pistacia chinensis,*** shade trees, USA, evaluation 8457
- ***Pistacia integerrima,*** fungal diseases, India, foliage 3168
- ***Pistacia lentiscus,*** seed dispersal, Formicidae, Italy 3830
- ***Pistacia vera,*** fruits, essential oils 9804
- ***Pithecellobium disciferum,*** wood anatomy 4629
- ***Pithecellobium dulce***
  - multipurpose trees 2006
  - mycorrhizas, *Glomus,* seedling growth 2239
  - plant water relations, drought resistance, Venezuela 3594
  - reclamation, mined land, species trials, India 3246
  - seeds, oils, chemistry, fatty acids 8907
  - silviculture, India 956
  - species trials
    - India 1673
    - reclamation, fly ash, India 9248
- ***Pithecellobium ebano***
  - insect pests
    - *Merobruchus major,* seeds, damage, Mexico 4039
    - *Stator beali,* seeds, damage, Mexico 4039
- ***Pithecellobium elegans,*** increment, diameter, Costa Rica, variation, climate 1841
- ***Pithecellobium guachapele,*** wood anatomy, wood properties 6428
- ***Pithecellobium leucocalyx,*** rain forests, Mexico, wood anatomy 1211
- ***Pithecellobium macradenium,*** afforestation, pastures, Costa Rica, stem form, growth 5051
- ***Pithecellobium pallens,*** soil surveys, matorral, Mexico 301
- ***Pithecellobium saman,*** plant water relations, drought, phenology, Costa Rica 2838
- ***Pithya cupressina,*** fungal diseases, *Juniperus,* Germany, damage 9113
- ***Pittosporum***
  - fruits, taxonomy, New Caledonia, new species 9888
  - mixed forests, seed dispersal, fruits, New Zealand 486
  - taxonomy
    - Borneo 7230
    - Sabah 7230
- ***Pittosporum crassifolium,*** seed germination, seed treatment, stratification 4271
- ***Pittosporum eugenioides***
  - foliage, frost resistance, plant anatomy, New Zealand, damage 8761
  - seed germination, seed treatment, stratification 4271
- ***Pittosporum obcordatum,*** seed germination, seed treatment, stratification 4271
- ***Pittosporum tenuifolium,*** seed germination, seed treatment, stratification 4271
- ***Pittosporum tobira***
  - reclaimed land, marine sediments, Japan, stand development 6703
- ***Pittosporum tobira*** *cont.*
  - street trees, microclimate, noise abatement, China 10156
- ***Pityogenes bidentatus,*** insect pests, *Pinus,* USA 5746
- ***Pityogenes chalcographus***
  - insect pests
    - *Picea abies*
      - Austria
        - plant composition 2354
        - terpenoids 2357
      - Germany 10057
        - biological control 9171
- ***Pityogenes knechteli,*** insect pests, *Pinus contorta,* Canada, interactions 2345
- ***Pityophthorus lichtensteini,*** insect pests, *Pinus,* UK 5741
- ***Pityophthorus orarius,*** insect pests, *Pseudotsuga menziesii,* USA, seed orchards 7473
- ***Plagiodera versicolora,*** insect pests, *Salix,* USA, biology 7468
- ***Planchonia careya,*** foliage, chemistry, Australia 7081
- ***Planchonia valida,*** wood chemistry, Indonesia 6448
- ***Planera,*** geographical distribution 1350
- **Planning**
  - forest management, silviculture, Germany 9617
  - forest roads, Indonesia 6202
- **Plant anatomy** (*see also* plant parts concerned, e.g. Bark; Foliage)
  - *Acer,* cultivars, foliage, plant morphology 8458
  - books 5920
  - *Calamus,* canes and rattans, foliage, epidermis, taxonomy 8135
  - *Calamus axillaris,* silica 6414
  - conifers
    - drought, foliage 6296
    - waterlogging, foliage 6296
  - *Eucalyptus,* foliage, lenticels, Australia 8055
  - Fabaceae
    - conferences 8488
    - phylogeny 8904
  - forest trees, measurement, techniques 2049
  - *Griselinia littoralis,* foliage, frost resistance, New Zealand, damage 8761
  - *Nothofagus menziesii,* foliage, frost resistance, New Zealand, damage 8761
  - *Pittosporum eugenioides,* foliage, frost resistance, New Zealand, damage 8761
  - plasma membranes, *Morus bombycis,* frost resistance, seasonal variation 2805
- **Plant breeding,** adaptation, conferences 8493
- **Plant communities,** indicator plants, USA, methodology, statistical analysis 7287
- **Plant competition**
  - *Abies,* stand structure, Japan, mixed forests 4798
  - *Acacia smallii,* grazing, simulation, pot experimentation 7255
  - *Acer macrophyllum,* USA, *Pseudotsuga menziesii,* increment 5140
  - agroforestry
    - choice of species, root systems, soil fertility 10100
    - soil fertility, Tropics, simulation 4107
  - *Arbutus unedo*
    - coppice, biomass, Spain 3865
    - light, plant physiology, Spain 8753
  - *Betula platyphylla,* stand density, Japan, yield forecasting 8697
  - broadleaved evergreen forests, increment, synecology, South Africa 223
  - broadleaves
    - North America, growth 3058
    - old fields, USA 7308
    - roots, soil physics, Australia 3059
    - savanna woodlands, Zimbabwe 4802
    - stand characteristics, yield tables, simulation 6832
    - stem form, buttresses, Papua New Guinea 3876
    - understorey, Costa Rica 6559
- **Plant competition** *cont.*
  - *Calamagrostis canadensis,* weeds, soil temperature, plant nutrition 5141
  - *Cassia siamea,* agroforestry, Togo 7573
  - *Casuarina equisetifolia,* plant nutrition, nitrogen fixation 6307
  - *Chamerion angustifolium,* weeds, soil temperature, plant nutrition 5141
  - conifers
    - altitude, USA 1895
    - forest plantations, woody weeds, height, diameter 6126
    - increment, growth models, USA 7675
    - stand characteristics, yield tables, simulation 6827
  - deciduous forests
    - stand structure
      - spatial distribution
        - Czech Republic 3108
        - Poland 3108
  - *Eucalyptus globulus,* Portugal, water availability, nutrients 4752
  - *Fagus sylvatica,* growth models, France, light, water availability 4753
  - forest plantations, conifers, USA, survival 6922
  - forest trees
    - forest ecology, plant succession, USA 7312
    - ground vegetation, soil fertility, roots, theory 3875
    - growth models, plant physiology, simulation, conferences 4179
    - natural thinning, simulation 9362
    - nature reserves, Germany 9956
    - populations, light, simulation 9363
    - seedlings, pot experimentation 3867
    - spatial distribution, patterns, measurement, techniques 9340
  - forests, simulation 5472
  - *Fraxinus excelsior*
    - *Fagus sylvatica,* natural regeneration, plant water relations, Germany 9781
    - increment, statistical analysis, Germany, mixtures 791
  - *Fraxinus pennsylvanica,* Canada 8988
  - *Gliricidia sepium,* agroforestry, roots, dynamics, Côte d'Ivoire 8425
  - grasses, *Prosopis glandulosa,* increment, USA 9013
  - heathlands, forest fires, simulation, Australia 3698
  - *Inga,* seedlings, understorey, Costa Rica 548
  - interspecific competition, *Pseudotsuga menziesii,* stand tables, weed control, USA 2709
  - landslides, forest trees, ferns, plant succession, Puerto Rico 3872
  - *Leucaena leucocephala,* agroforestry, Togo 7573
  - *Liquidambar styraciflua*
    - climbers, USA, woody weeds 6122
    - plant water relations, woody weeds, USA 1771
    - soil water potential, USA 166
  - mixed forests
    - stand structure
      - spatial distribution
        - Czech Republic 3108
        - Poland 3108
  - mixtures
    - *Larix sibirica*
      - *Betula pendula,* root systems, Russia 2656
      - *Picea abies,* root systems, Russia 2656
      - *Pinus sylvestris,* root systems, Russia 2656
  - multipurpose trees, agroforestry, pruning, root systems, Indonesia 10102
  - mycorrhizas, *Pisolithus tinctorius, Pinus rigida,* USA 9995
  - *Picea abies,* provenance trials, Sweden 2178
  - *Picea mariana,* seedling growth, light, Canada 3880
  - *Pinus contorta,* ground vegetation, Canada 1745

Plant competition *cont.*
- *Pinus pinea,* stand characteristics, yield tables, simulation 6831
- *Pinus ponderosa,* planting stock, USA 4329
- *Pinus radiata*
  - agroforestry, foliar diagnosis, statistical analysis, New Zealand 4957
  - nitrogen fertilizers, agroforestry, New Zealand 1568-1569
  - seedling growth, weeds, New Zealand 4342
- *Pinus sylvestris*
  - foliage, distribution, light 2950
  - provenance trials, experimental design, increment, Sweden 9415
  - seedling growth, weeds, allelopathy, Sweden 1759
  - stand development, Switzerland, growth, variation 3884
- *Pinus taeda*
  - forest plantations, thinning, USA 2122
  - plant water relations, woody weeds, USA 1771
  - site preparation, USA 3444
  - spacing, USA, growth 1780
  - water stress, USA 166
- *Populus,* Netherlands, growth 6938
- *Populus* 'Beaupré', canopy, development 7381
- *Prunus pensylvanica,* seedling growth, browsing damage, USA 3878
- *Pseudotsuga menziesii*
  - growth models
    - Canada 9361
    - weed control, USA 2710
  - woody weeds
    - USA
      - economic evaluation 171
      - simulation 171
- *Quercus douglasii,* natural regeneration, drought resistance, USA 4517
- *Salix,* root pruning, shelterbelts, crops, New Zealand 2411
- *Tilia cordata,* increment, statistical analysis, Germany, mixtures 791
- woody weeds, conifers, Canada, growth 4407

Plant composition (*see also* plant parts concerned, e.g. Bark; Foliage; Seeds; Wood chemistry)
- *Acacia leucophloea,* seeds, edible species 2061
- *Acer saccharum,* forest decline, soil chemistry, USA 9860
- alkaloids, *Kopsia profunda* 9825
- amino acids, Ingeae, chemotaxonomy, evolution 8958
- bamboos, *Phyllostachys edulis,* pectins 9833
- *Betula pubescens,* coppice, buds, dormancy, seasonal variation 1209
- *Betula tortuosa,* foliage, Finland, variation 2933
- broadleaves, coppice, silvicultural conversion, Italy 8935
- browse, choice of species, indigenous knowledge, Kenya 6669
- carbohydrates, *Populus* 'Dorskamp', air pollution, ozone 2879
- coniferous forests, remote sensing, USA 1045, 1344
- defence mechanisms
  - *Lepus americanus*
    - *Betula,* evolution, USA 4915
    - *Populus,* evolution, USA 4915
- *Erica arborea,* carbon dioxide enrichment, Italy 7031
- *Ervatamia corymbosa,* alkaloids 8078
- ethanol, *Picea mariana,* planting stock, heat stress, measurement 9338
- *Fagus sylvatica*
  - air pollution, lead, altitude, Germany 4567
  - bark, suberin 6461
  - fertilizers, plant nutrition, Sweden 8594
- flavones, Cycadopsida, chemotaxonomy 3048

Plant composition *cont.*
- flavonoids
  - chemotaxonomy, interactions, reviews 9815
  - insects, interactions, reviews 9815
  - medicinal plants, interactions, reviews 9815
  - mycorrhizas, interactions, reviews 9815
  - plant growth regulators, interactions, reviews 9815
  - plant pathogens, interactions, reviews 9815
  - root nodules, interactions, reviews 9815
- forest trees, foliage, optical properties, analytical methods 1234
- *Ginkgo biloba,* diterpenoids, analytical methods 9330
- insect pests
  - *Bupalus piniarius, Pinus sylvestris,* air pollution, Germany 8335
  - *Lymantria dispar*
    - *Betula papyrifera,* carbon dioxide enrichment 5711
    - *Pinus strobus,* carbon dioxide enrichment 5711
  - *Rhyacionia frustrana, Pinus,* host specificity 6451
  - *Schizolachnus pineti, Pinus sylvestris,* air pollution, ozone 4035
- major elements
  - *Fagus sylvatica,* Austria 227
  - *Populus tremuloides,* herbicides, Canada 7975
- medicinal plants, Togo, flavonoids 979
- metals, *Picea abies,* acid deposition, soil, acidification 4541
- monoterpenoids, fungal diseases, *Cronartium fusiforme, Pinus,* resistance 9107
- nutrients
  - *Acacia,* biomass production, soil chemistry, India 2699
  - *Cryptomeria japonica,* forest plantations, biomass production, India 3482
  - distribution, *Eucalyptus camaldulensis,* forest plantations, Sri Lanka 5294
  - *Pinus taeda,* air pollution, biomass production, USA 1158
- phenolic compounds
  - forest trees, allelopathy, forest litter, Spain 7315
  - mycorrhizas, *Pisolithus tinctorius, Pinus echinata,* fertilizers 4015
- phosphoproteins, *Sequoia sempervirens,* vegetative propagation, grafting, juvenility 8922
- *Picea*
  - taxonomy
    - plant morphology
      - Mexico 501
      - USA 501
- *Picea glauca*
  - planting stock, bare rooted stock, lifting 1722
  - site class assessment, soil properties, ground vegetation, Canada 8704
- *Picea glauca* × *Picea engelmannii,* seedlings, acclimatization, proteins 3565
- *Picea rubens,* ozone, carbohydrates, nitrogen 6464
- *Pinus caribaea,* plant nutrition, boron, copper, seedling growth 316
- *Pinus contorta,* plant diseases, USA, *Dendroctonus ponderosae* 7205
- *Pinus radiata,* soil fertility, forest litter, Australia 5117, 5268
- *Pinus sylvestris*
  - air pollution, Russia 4568
  - fertilizers, increment, peatlands, Finland 6068
- *Pinus taeda*
  - biomass, USA 8708
  - seed orchards, USA, variation 9877
- polyamines, major elements, techniques 7656
- *Populus deltoides,* foliage, drought resistance, water balance 1121

Plant composition *cont.*
- propolis
  - *Clusia,* Venezuela 1232
  - *Populus,* Temperate Zones 1232
- proteins
  - *Cercis canadensis,* tissue culture, ovule culture, somatic embryogenesis 5085
  - *Quercus serrata,* seedlings, plant nutrition, enzymes 6316
  - *Santalum album,* embryo culture, callus 419
- *Pseudotsuga menziesii*
  - flowering, plant growth regulators, plant nutrition, nitrogen 4672
  - grafting, compatibility, disease resistance 1455
- *Quercus,* carbon dioxide enrichment, photosynthesis, Italy 4465
- *Quercus cerris,* coppice, silvicultural conversion, Italy 8935
- resins, *Betula,* histology, trichomes, defence mechanisms 2985
- secondary metabolites
  - carbohydrates, *Betula pendula,* carbon dioxide enrichment, plant nutrition 4665
  - Myoporaceae, reviews 3753
- starch, metabolism, *Pinus edulis,* seedlings 2088
- *Taxodium distichum,* flooding, hypoxia, photosynthesis 3606
- taxol
  - biosynthesis
    - *Taxus,* medicinal plants, hydroponics 2679
    - *Taxus brevifolia,* medicinal plants 3011
- *Tsuga heterophylla,* site class assessment, soil chemistry, Canada 8776

Plant development
- *Archaeopteris,* palaeobotany 3889
- *Callixylon,* palaeobotany 3889
- juvenility, maturation, conifers, reviews 9785
- *Larix laricina,* cambium, biochemistry 9786
- *Picea abies,* maturation, cell membranes, composition, lipids 3759
- *Solanum aviculare* 2966

Plant diseases, *Pterocarpus indicus,* lightning, bark, Singapore 9857

Plant disorders
- *Adansonia digitata,* fungal diseases, *Capnodendron,* Zimbabwe 7203
- diseases, forest trees, books 8467
- forest trees, Canada, books 7633
- mountain forests, hydrology, cycling, Sabah 3806
- *Platanus acerifolia,* Poland 5618

Plant ecology, vessels, plant water relations, Venezuela 4622

Plant genetic resources
- conservation
  - forest trees, Denmark 8187
  - *Pinus strobus,* forest management 4815
  - woody plants, Denmark 8187

Plant growth regulators
- abscisic acid
  - *Betula pubescens,* buds, dormancy, plant physiology 3767
  - broadleaves
    - plant water relations
      - stomatal resistance
        - Germany 2083
        - Israel 2083
        - USA 2083
  - forest trees, seedlings, water stress, plant physiology 3018
  - *Larix eurolepis,* tissue culture, somatic embryogenesis, micropropagation 3401
  - *Picea glauca,* tissue culture, somatic embryogenesis 6048
  - *Pinus taeda,* seeds, development, embryogenesis 9849
- *Acer saccharinum,* bark, mineral oils, penetration, laboratory tests 4683
- *Albizia procera,* forest nurseries, nitrogen fertilizers, India 9474

Plant growth regulators *cont.*
- auxins
  - inhibitors, *Picea abies,* shoots, growth 8925
  - *Pinus contorta,* shoot cuttings, tissue culture, growth rate 3405
  - *Pinus taeda,* shoot cuttings, genetic variation, rooting 5068
- bamboos
  - *Dendrocalamus strictus,* seed germination 3380
  - *Thyrsostachys siamensis,* seed germination 3380
- benzyladenine
  - conifers, photosynthesis, acid deposition 462
  - *Picea omorika,* bud culture, somatic embryogenesis 88
- *Betula pubescens,* coppice, buds, dormancy, seasonal variation 1209
- *Casuarina cunninghamiana,* root nodules 5588
- *Chamaecyparis obtusa,* volatile compounds, monoterpenes 1260
- conifers
  - drought 4518
  - seedling growth 1268
- cytokinins
  - *Betula pubescens,* coppicing, sap flow, growth 3804
  - *Leucadendron rubrum,* sex, phenology, South Africa 3778
  - metabolites, *Picea abies,* seedlings 3797
  - *Picea abies,* roots, nutrient deficiencies, metabolism 4698
  - *Pinus pinea,* seedlings, roots, growth 448
- daminozide, *Acacia mangium,* seedling growth, plant water relations 445
- ethylene
  - biosynthesis, *Pinus sylvestris,* foliage, stress 5409
  - *Picea abies*
    - cell growth, ultrastructure, peroxidases 8108
    - somatic embryogenesis, growth 2585
- *Eucalyptus globulus,* wood strength 6360
- *Eucalyptus nitens,* flowering, induction, Australia 4734
- *Fagus sylvatica,* vegetative propagation, shoot cuttings 6884
- flavonoids, interactions, reviews 9815
- flurprimidol
  - *Acer saccharinum,* USA, growth, morphology 2063
  - broadleaves, USA, biomass, growth 3781
  - *Pseudotsuga menziesii,* seedling growth 3794
- fungal diseases, *Dothiorella gregaria, Populus,* pruning, control 9086
- fusicoccin, *Acer pseudoplatanus,* ethylene production, cell culture 7179
- gibberellic acid, *Sclerocarya birrea,* shoots, development 8923
- gibberellins
  - broadleaves 3795
  - *Eucalyptus*
    - buds 3768
    - cambium 3768
  - *Larix,* flowering, induction 8952
  - *Larix laricina,* buds, flowering, plant development 9848
  - metabolism, *Dalbergia dolichopetala,* seeds 3756
  - *Picea abies*
    - buds, metabolism, translocation 9846
    - flowering 3777
    - flowers, metabolism, translocation 9846
  - *Picea glauca*
    - flowering, effects 9871
    - sex expression, effects 9871
  - *Picea mariana,* cones, root pruning, production 9847
  - *Picea sitchensis,* cones, distribution, girdling 3042

Plant growth regulators *cont.*
- gibberellins *cont.*
  - *Pinus banksiana*
    - sex expression
      - plant nutrition
        - plant water relations 1318
        - topping 1318
  - *Pinus strobus,* cones, production, Canada 9855
  - *Salix pentandra*
    - photoperiodism 6488, 8927
    - seedlings 3017
  - *Santalum album,* flowering, induction, India 2099
  - temperature, *Picea abies,* flowering 3829
- IAA
  - *Abies balsamea,* cambium, biochemistry, seasonal variation 5403
  - mycorrhizas, *Hebeloma cylindrosporum, Pinus pinaster* 8284
  - *Picea abies,* foliage, seasonal variation, Czech Republic 457
- IBA, *Acacia,* shoot cuttings, roots 7736
- *Liquidambar styraciflua,* fruiting, control, USA 7606
- *Liriodendron tulipifera,* wood strength 6360
- mangroves, *Avicennia marina,* seedling growth, plant physiology 4699
- *Muntingia calabura,* seed germination, temperature, light 9440
- mycorrhizas
  - *Laccaria bicolor, Pinus sylvestris,* plant nutrition 3159
  - *Pisolithus tinctorius, Quercus rubra,* planting stock 5594
- paclobutrazol
  - *Acacia mangium,* seedling growth, plant water relations 445
  - *Picea abies,* Christmas trees, Italy 4371
- *Picea abies*
  - Christmas trees 2667
  - embryo culture 8926
  - reproductive behaviour, seed orchards, root pruning, Sweden 3828
  - seedling growth 463
- *Picea pungens,* shoots, abnormal development 4716
- *Pinus pinea,* roots, development 2964
- *Pinus sylvestris*
  - reaction wood, IAA 4659
  - seed production, Russia 2073
  - seedling growth 463, 1269
  - seeds 1269
  - shoots, growth, Russia 2074
- *Populus tremula* × *Populus tremuloides,* IAA, metabolism 7184
- *Populus tremula* × *Populus tremuloides,* tissue culture, shoots, rooting 9455
- *Prosopis juliflora,* seed germination, salt tolerance 6035
- *Pseudotsuga menziesii,* plant composition, flowering, plant nutrition, nitrogen 4672
- *Shorea leprosula,* shoot cuttings, Malaysia 6890
- treatment, *Acacia mangium,* planting stock, survival, growth 445
- woody plants, shoot cuttings 1258

Plant morphology
- *Acacia,* browsing damage, foliage, South Africa 5808
- *Acer,* cultivars, foliage, plant anatomy 8458
- *Acer saccharum,* roots, USA 409
- bamboos
  - *Bambusa pallida,* genetic variation, induced mutations 5558
  - *Sinarundinaria nagalandiana,* taxonomy, new species, India 7219
- *Betula,* light, biomass, Finland 9667
- *Betula pubescens*
  - coppice, buds, dormancy, seasonal variation 1209
  - shoot cuttings, micropropagation, rooting 5067

Plant morphology *cont.*
- broadleaves
  - foliage
    - apical meristems 2044
    - crown, light intensity, development 2014
  - habit, taxonomy, Poland 1207
  - pioneer species, topography, Japan 8765
  - water stress, genotype environment interaction, USA 2206
- *Caesalpinia,* flowers, secretion, taxonomy, ecology 8901
- canes and rattans, Malaysia, roots, growth 6434
- *Castanea dentata* × *Castanea mollissima,* genetics, inheritance 5545
- *Cecropia tessmanii,* symbiosis, Formicidae, plant nutrition 3716
- *Chamaecyparis,* Japan, canopy, effects 9792
- *Chlorophora,* reproductive behaviour, Ghana 5420
- conifers
  - habit, taxonomy, Poland 1206
  - herbicide resistance, bilanafos, seedling growth 5137
  - seedlings, light penetration, plant physiology, adaptation 6258
- *Cryptomeria japonica,* stems, wind damage, Japan 4479
- *Cupressus sempervirens,* variety trials, site factors, Mediterranean Region 6020
- development, ornamental woody plants, analysis 1208
- *Eucalyptus,* taxonomy, Australia 496
- *Eucalyptus urophylla,* progeny testing, genetics, Indonesia 2204
- Fabaceae
  - conferences 8488
  - flowers, development, phylogeny 8975
  - meiosis, India, variation 4650
- *Fagus sylvatica,* light, water stress, photosynthesis 1929
- *Faidherbia albida*
  - seedlings, increment, Burkina Faso 6061
  - shoot cuttings, increment, Burkina Faso 6061
- forest trees
  - growth models, carbon balance, equations 9589
  - habit, taxonomy, Poland 1322
  - measurement, sampling 6956
  - taxonomy, habit, Poland 2114-2115
- *Juglans regia,* geographical distribution, silvicultural characters, Italy 6138
- *Kandelia candel,* growth, development 8063
- *Leucaena leucocephala,* plant nutrition, vesicular arbuscular mycorrhizas, growth 6614
- *Leucaena leucocephala* × *Leucaena diversifolia,* Brazil 8074
- *Libocedrus chilensis,* reproductive behaviour, Argentina 2104
- mangroves, allometry, Peninsular Malaysia 6427
- ornamental woody plants, pruning, techniques 7610
- *Paullinia cupana,* genetic variation, Brazil 587
- *Picea*
  - shoots, cones, Canada 9787
  - taxonomy
    - plant composition
      - Mexico 501
      - USA 501
- *Picea abies*
  - foliage, light, Estonia 7030
  - forest plantations, beating up, increment, Sweden 9529
  - Romania, crown, phenotypic variation 9031
- *Pinus banksiana,* thinning, Canada, growth 6127
- *Pinus ponderosa,* genetic variation, drought resistance, plant physiology, USA 1889

Plant morphology *cont.*
- *Pinus sylvestris*
  - climate, water stress, UK 5222
  - forest plantations, beating up, increment, Sweden 9529
  - Russia 4657
- *Populus*
  - genetic variation
    - increment 5551
    - tree breeding, China 593
- *Prosopis cineraria*, progeny testing, early selection, India 2209
- *Prosopis juliflora*, variety trials, increment, India 1662
- *Pseudotsuga menziesii*, buds, flowering, techniques, ionizing radiation 4732
- *Quercus robur*, light, Germany, growth 7028
- *Sorbus*, hybrids, population genetics, Switzerland 6596
- street trees, pruning, techniques 7610

Plant nutrition
- *Acer saccharum*, photosynthesis, soil pH, USA 4710
- *Alnus nepalensis*, cycling, India 1947
- aluminium, toxicity, *Picea rubens*, gas exchange, seedling growth 8819
- *Argania spinosa*, micropropagation, mycorrhizas, *Glomus intraradices* 3147
- *Banksia prionotes*, translocation, Australia 1288
- *Betula*, pioneer species, Germany 2850
- *Betula alleghaniensis*, seedling growth, biomass distribution 6426
- *Betula papyrifera*, thinning, Canada, effects 9516
- *Betula pendula*
  - carbon dioxide enrichment
    - biomass production 7862
    - plant composition, secondary metabolites, carbohydrates 4665
  - foliage, phenology, defoliation, temperature 4617
  - root shoot ratio 7955
  - soil toxicity, cadmium, seedling growth 4501
- *Betula populifolia*, seedling growth, biomass distribution 6426
- boron, copper, *Pinus caribaea*, seedling growth, plant composition 316
- broadleaves
  - biomass production, plant water relations, gas exchange, Spain 3793
  - carbon dioxide enrichment, heat stress, interactions 3547
  - foliage, texture, Turkey 1224
  - mulches, herbicides, Canada 5135
  - plant succession, Singapore 4543
  - reclamation, landfills, species trials, UK 4948
- cadmium
  - copper, uptake, *Betula pendula*, seedlings 7971
  - zinc, *Picea abies*, growth rings 2955
- *Calamagrostis canadensis*, weeds, plant competition, soil temperature 5141
- calcium
  - *Picea abies* 2858
  - *Populus trichocarpa*, antagonism 1290
- *Casuarina*, growth 5298
- *Casuarina collina*, geographical distribution, site factors, New Caledonia 8887
- *Casuarina equisetifolia*, plant competition, nitrogen fixation 6307
- *Cecropia tessmanii*, symbiosis, Formicidae, plant morphology 3716
- *Chamerion angustifolium*, weeds, plant competition, soil temperature 5141
- *Cibotium glaucum*, rain forests, USA, growth 5455
- coniferous forests, foliage, USA 1346
- conifers
  - air pollution, throughfall, Netherlands, nitrogen 5318
  - foliage, air pollution, UK 6453
  - frost resistance, photosynthesis 8820

Plant nutrition *cont.*
- conifers *cont.*
  - herbicide resistance, bilanafos, photosynthesis 5138
  - soil fertility, forestry practices, Canada 7793
- copper
  - *Pinus*, plant morphology, growth 8793
  - zinc, *Kandelia candel*, salt tolerance, seedling growth 4539
- *Cordia alliodora*, Costa Rica, growth 5130
- *Cupressus arizonica*, fertigation, nurseries, hydroponics 10153
- cycling
  - forest management 7954
  - nutrient uptake, conferences 6802
- *Eucalyptus globulus*, nitrogen fertilizers 901
- *Eucalyptus grandis*, carbon dioxide enrichment 269
- *Eucalyptus tereticornis*, forest plantations, biomass production, India 7973
- *Fagus sylvatica*, fertilizers, plant composition, Sweden 8594
- forest decline
  - aluminium, toxicity, France, reviews 4717
  - soil chemistry, interactions 3820
- forest ecology, root systems 8139
- forest management, plant water relations, Australia 7826
- forest trees 2850
  - carbon dioxide enrichment, roots, plant water relations 9670
  - reviews 5300
  - savanna woodlands, phenology, Zambia 6308
  - silviculture, statistical analysis 5014
  - soil chemistry
    - fertilizers, logging, conferences 770
    - soil amendments, logging, conferences 770
- *Ginkgo biloba*, nitrogen fertilizers, USA 1709
- growth
  - conifers, acid deposition, Finland 7098
  - vesicular arbuscular mycorrhizas, *Glomus*, *Acacia* 2233
- *Gymnostoma*, geographical distribution, site factors, New Caledonia 8887
- *Heliocarpus appendiculatus*, foliage, age, light, photosynthesis 6491
- *Hopea*, mycorrhizas, seedlings 4847
- insect pests
  - *Lymantria dispar*, *Quercus*, USA, resistance 7446
  - *Phyllaphis fagi*
    - *Fagus sylvatica*
      - Belgium, forest nurseries 8328
      - Germany, defence mechanisms 5685
- iron, forest trees, waterlogging, USA 3638
- *Leucaena leucocephala*, plant morphology, vesicular arbuscular mycorrhizas, growth 6614
- magnesium, *Populus trichocarpa*, antagonism 1290
- mangroves, *Rhizophora mangle*, habit, plant physiology, salinity 465
- metal tolerance, mycorrhizas, forest trees 8276
- *Metrosideros polymorpha*, soil chemistry, Hawaii, chronosequences 6287
- minerals, *Quercus robur*, soil chemistry, Netherlands 320
- mycorrhizas
  - *Hebeloma crustuliniforme*, *Picea abies* 5569
  - *Laccaria bicolor*, *Pinus sylvestris*, plant growth regulators 3159
  - *Leucaena leucocephala*, seedling growth 596
  - *Pinus*, nutrient uptake 8256
  - *Suillus bovinus*, *Pinus sylvestris* 5581

Plant nutrition *cont.*
- nitrogen
  - *Acer pseudoplatanus*
    - seedlings 2857
    - simulation 3637
  - ammonium, *Picea glauca*, roots 9729
  - *Betula lenta*, root systems 2020
  - *Betula pendula*, forest litter, decomposition, carbon dioxide enrichment 7900
  - broadleaves
    - enzymes, seedling growth 5289
    - riparian forests, flooding, France 3640
  - *Cassia*, phosphorus fertilizers, Nigeria 9724
  - conifers, seedling growth, mathematics 7078
  - *Eucalyptus*, forest decline, enzymes, Australia 3635
  - *Fagus sylvatica*, ground vegetation, acid deposition, Sweden 3755
  - foliage, development, tropical forests, Panama 315
  - forest trees, roots, growth, development 6897
  - *Gliricidia sepium*, phosphorus fertilizers, Nigeria 9724
  - *Gmelina arborea*, foliage, growth, photosynthesis 1133
  - *Juniperus osteosperma*, plant water relations, USA 4505
  - mycorrhizas
    - forest trees 8273
    - *Glomus*, *Erythrina poeppigiana* 5596
    - methodology, isotopes 2493
    - *Paxillus involutus*, *Pinus* 5604
    - *Suillus bovinus*, *Pinus* 5604
  - nitrate, *Picea glauca*, roots 9727-9728
  - nutrient allocation, forest trees, foliage, UK 1944
  - phosphorus
    - *Bauhinia variegata*, forest nurseries, India 8597
    - *Cassia*, pruning, Nigeria 5153
    - *Eucalyptus grandis*, seedling growth, simulation 32
    - *Gliricidia sepium*, pruning, Nigeria 5153
  - *Picea*, USA 9721
  - *Picea abies* 8816
  - *Picea mariana*, seedling growth, climatic change, genetic variation 9666
  - *Picea sitchensis*, forest litter, decomposition, carbon dioxide enrichment 7900
  - *Pinus banksiana*
    - seedlings
      - metabolism 317
      - photosynthesis 8111
    - sex expression
      - gibberellins
        - plant water relations 1318
        - topping 1318
  - *Pinus densiflora*, nitrogen fertilizers, plant water relations 2852
  - *Pinus edulis*, plant water relations, USA 4505
  - *Pinus ponderosa*, ozone, water stress 8105
  - *Pinus radiata*, stem form, genetic variation 2949
  - *Pinus sylvestris*
    - enzymes, induction, light 1285
    - foliage, shedding, Sweden 4528
    - photosynthesis, Finland, seasonal variation 8098
    - seedling growth
      - foliage 444
      - mycorrhizas, enzymes 1140
  - *Pinus taeda*, roots, morphology, carbon dioxide enrichment 6432
  - *Populus grandidentata*, roots, growth, carbon dioxide enrichment 6433
  - *Populus tremuloides*, seedling growth, air pollution, ozone 9743

- **Plant nutrition** *cont.*
  - nitrogen *cont.*
    - *Prosopis glandulosa,* plant water relations, carbon dioxide, concentration 5227
    - *Pseudotsuga menziesii,* plant composition, flowering, plant growth regulators 4672
    - *Robinia pseudoacacia*
      - seedlings
        - photosynthesis
          - foliage 2078
          - growth 2078
    - *Salix myrsinifolia,* seedling growth, phenolic compounds 6317
    - *Salix viminalis*
      - biomass, growth models, Sweden 4210
      - foliage
        - development 2854
        - growth, plant water relations 8054
    - vegetation types, climate, North America 1130
  - nitrogen metabolism, conifers, air pollution, Netherlands 5290
  - nodulation, *Rhizobium, Leucaena leucocephala,* biomass production 7391
  - nutrient allocation
    - carbon, *Pinus resinosa,* roots, USA 7076
    - forest trees
      - ozone
        - simulation 1977
        - stress factors, interactions 1975
    - *Picea abies,* carbon, nitrogen, phosphorus 2072
    - *Pinus,* growth 7075
    - *Populus eugenei,* biomass, assimilation, carbon 3641
    - *Quercus robur,* carbon 3620
  - nutrient availability
    - broadleaves, seedling growth 6309
    - mangroves, seedling growth, light intensity 5386
  - nutrient balance, *Picea abies,* fertilizers, irrigation, Sweden 7966
  - nutrient content, *Quercus ilex,* Spain, variation 7957
  - nutrient deficiencies
    - forest trees
      - biogeochemistry 7974
      - simulation, growth, nutrient allocation 7077
    - *Gmelina arborea,* soil chemistry, site factors, Costa Rica 4546
    - magnesium, *Betula pendula,* growth 5292
    - manganese, *Picea abies,* foliage, plant physiology 3642
    - *Picea abies*
      - forest decline, fungal diseases, Austria 8117
      - roots, cytokinins, metabolism 4698
    - *Pinus taeda,* carbon dioxide enrichment, photosynthesis 1881
  - nutrient reserves
    - biomass, wind damage, Puerto Rico 996
    - biomass production, Finland, carbon, nitrogen 7968
    - broadleaves, USA, bottomland forests 3626
  - nutrient transport, sucrose, metabolism, *Acer saccharinum,* sulfur dioxide 7181
  - nutrient uptake
    - *Acacia auriculiformis,* seedlings, pot experimentation 1945
    - *Ailanthus excelsa,* nitrogen-phosphorus fertilizers, increment, India 9468
    - broadleaves, seedlings, USA, canopy gaps 1144
    - calcium, forest trees, soil chemistry, models 3627
    - *Leucaena leucocephala,* seedlings, pot experimentation 1945

- **Plant nutrition** *cont.*
  - nutrient uptake *cont.*
    - magnesium
      - forest trees, soil chemistry, models 3627
      - *Pinus sylvestris*
        - roots
          - measurement 9726
          - techniques 9726
    - *Morus australis,* weed control, India 8642
    - mycorrhizas
      - *Boletus,* Dipterocarpaceae, seedlings 1448
      - *Russula,* Dipterocarpaceae, seedlings 1448
      - *Scleroderma columnara,* Dipterocarpaceae, seedlings 1448
    - nitrogen, *Pinus sylvestris,* forest nurseries, NPK fertilizers 4306
    - nutrient deficiencies, *Picea glehnii,* serpentine soils, Japan 7046
    - *Picea abies*
      - nitrogen fertilizers, water stress, photosynthesis 7945
      - roots
        - fertilizers, Sweden 9788
        - irrigation, Sweden 9788
      - soil chemistry, methodology 7647
    - *Pinus caribaea,* biomass production, savannas, Nigeria 2704
    - *Pinus elliottii*
      - roots, simulation 5301
      - simulation, USA 2860
    - *Pinus sylvestris,* nitrogen fertilizers, Russia 3409
    - translocation, *Chamaecyparis thyoides,* USA, peatlands 5295
  - nutrition physiology
    - *Erythrina poeppigiana,* pruning, nitrogen fixation, Costa Rica 9733
    - manganese, *Betula pendula* 324
    - nutrient allocation, chaparral, woody plants, USA 2853
  - phosphorus
    - *Acacia mangium,* seedling growth, nitrogen fixation, provenance 6313
    - broadleaves, riparian forests, flooding, France 3640
    - *Casuarina equisetifolia,* roots, development, morphology 2941
    - *Gmelina arborea,* foliage, growth, photosynthesis 1133
    - hypoxia, *Pinus serotina* 2846
    - molybdenum, *Robinia pseudoacacia,* forest nurseries, India 6089
    - mycorrhizas
      - *Glomus aggregatum*
        - *Albizia ferruginea* 5612
        - *Enterolobium cyclocarpum* 5612
      - *Pisolithus tinctorius, Pinus taeda,* carbon dioxide enrichment 6619
    - *Picea abies,* provenance trials, genetic variation, Poland 1131
    - *Picea sitchensis,* UK, seasonal growth 7959
  - *Picea,* biomass production, biogeochemistry, cycling, Russia 7970
  - *Picea abies*
    - acid deposition, nitrogen 3656
    - air pollution, nutrient deficiencies 5327
    - fertilizers
      - irrigation, Sweden 4538
      - lime, boron fertilizers, humus, Finland 2616
    - foliage, age, Western Europe 7958
    - forest decline
      - Germany
        - amino acids 3805
        - magnesium 1127
      - soil chemistry, fertilizers, France 4302
    - forest plantations, Slovenia, seedling growth 5126
    - increment, plant water relations, Denmark 7819

- **Plant nutrition** *cont.*
  - *Picea abies cont.*
    - photosynthesis, pigments 2079
    - plant water relations, Denmark, methodology 7650
    - seedlings, soil toxicity, aluminium, calcium 1125
    - soil toxicity, aluminium, seedlings 7969
  - *Picea mariana*
    - North America, reviews 4615
    - NPK fertilizers, spacing, Canada 1714
  - *Picea rubens,* forest decline, acid deposition, soil chemistry, aluminium 1141
  - *Picea sitchensis*
    - carbon dioxide enrichment, plant water relations, water stress, seedling growth 8106
    - sewage, UK 895
    - whole tree logging, UK, productivity 1136
  - *Pinus*
    - increment, volume, Sweden 6182
    - shoots, plant physiology, USA 2036
  - *Pinus contorta*
    - nitrogen cycle, fertilizers, Canada 325
    - nitrogen fertilizers, increment, Canada 9462
    - soil chemistry, biomass, USA 9730
  - *Pinus peuce,* seed germination, seedling growth, forest nurseries, UK 9469
  - *Pinus pinaster,* salt tolerance, provenance trials 9712
  - *Pinus pinea,* roots, development, assimilation 2965
  - *Pinus radiata*
    - agroforestry, foliar diagnosis, statistical analysis, New Zealand 4957
    - artificial regeneration, site preparation, soil chemistry, South Africa 180
    - carbon dioxide enrichment 269
    - nitrogen fertilizers
      - agroforestry, New Zealand 1568-1569
      - genetic variation, Australia 7752
    - whole tree logging, New Zealand, productivity 1135
  - *Pinus resinosa*
    - growth models 4208
    - nitrogen fertilizers, hardening, plant water relations 4305
  - *Pinus sylvestris*
    - air pollution, Russia 7094
    - crown, foliage, age, Finland 3622
    - foliage, waxes, morphology 1129
    - NPK fertilizers, Russia 7757
    - peatlands, increment, Sweden 9934
    - potassium fertilizers, increment, Finland 129
    - shoots, development, genetic variation 3717
    - soil toxicity, aluminium 6310
  - *Pinus taeda,* acid deposition, air pollution, ozone, soil enzymes 9738
  - *Populus deltoides,* foliage, air pollution, sulfur dioxide, photosynthesis 7183
  - *Populus tremula,* pioneer species, Germany 2850
  - potassium
    - *Populus trichocarpa,* antagonism 1290
    - *Rhizophora apiculata,* seedling growth 6113
  - *Pseudotsuga menziesii*
    - biomass, stand development, France 7074
    - roots, soil water content, growth 1725
  - *Quercus*
    - forest decline, air pollution, soil chemistry, Austria 5309
    - photosynthesis, water use efficiency, USA 6483
  - *Quercus ilicifolia,* defoliation, cycling, USA 322
  - resorption, *Betula tortuosa,* abscission, Sweden 6482

Plant nutrition *cont.*
- *Robinia pseudoacacia,* foliage, air pollution, sulfur dioxide, photosynthesis 7182
- roots, morphology, reviews 8890
- *Salix*
  - biomass production, Finland 5184
  - NPK fertilizers, biomass, Finland 7756
- *Salix caprea,* pioneer species, Germany 2850
- *Salix viminalis*
  - foliage, nutrients, analysis, Sweden 318
  - genetic variation, genotype environment interaction, increment, soil types 4838
- *Senecio cooperi,* epiphytes, adventitious roots, Costa Rica 3732
- shrubs, shoots, fire ecology, Spain 9775
- soil chemistry, reviews, aluminium, calcium 6315
- street trees, tree injection, nutrients, soil air, UK 10143
- *Tectona grandis,* site class assessment, West Africa, growth effects 4545
- *Thuja occidentalis,* increment, Canada 8699
- trace elements
  - *Betula pendula* 1148
  - *Quercus serrata,* seedlings, enzymes, plant composition 6316
- translocation
  - carbon, *Pseudotsuga menziesii,* ozone, soil water 1142
  - conifers, silviculture, Canada 6324
- use efficiency, peatlands, USA, simulation 9722
- vegetation types, soil fertility, foliage, morphology, Peninsular Malaysia 6551
- woody plants, plant composition, proteins, nitrogen 3758

Plant parasitic nematodes
- amenity trees, UK, books 6
- *Bursaphelenchus*
  - *Pinus,* cellulase, production, virulence 4896
  - *Pinus thunbergii,* Japan, cavitation 2372
- *Bursaphelenchus mucronatus*
  - *Picea abies,* vectors 1495
  - *Pinus pinaster,* Italy 9182
  - *Pinus sylvestris,* vectors 1495
  - Russia, surveys 5780
- *Bursaphelenchus xylophilus*
  - conifers
    - spread, wood chips, survival 5778
    - USSR, spread, risk 9183
  - *Pinus*
    - Korea Republic, pathogenicity, control 8346
    - resistance
      - histology 5776
      - plant physiology 5777
  - *Pinus densiflora,* stems, respiration 4895
  - *Pinus sylvestris,* USA 9180
  - *Pinus thunbergii*
    - host parasite relationships 5774
    - Japan, damage, wood anatomy 2373
    - plant water relations 8348
- *Calamus rotang,* embryo culture, roots, galls 8347
- *Fergusobia tumifaciens*
  - *Eucalyptus deglupta*
    - Philippines
      - control 1476
      - damage 1476
- *Meloidogyne*
  - *Acer,* USA, resistance 3189
  - *Catalpa,* control 2384
  - *Cercis,* susceptibility 5773
  - *Quercus,* USA, susceptibility 3188
  - shade trees, crops, Cuba 1496
- *Paralongidorus sali, Shorea robusta,* India, damage 5779
- *Pinus,* Bulgaria, surveys 9181
- *Pinus caribaea,* Nigeria 9179

Plant parasitic nematodes *cont.*
- surveys
  - forest soils, South Africa 669
  - *Leucaena leucocephala,* India 1497
- *Tylenchulus semipenetrans, Cunninghamia lanceolata,* soil properties, China 5775

Plant pathogenic bacteria, *Xylella fastidiosa,* amenity trees, USA 2286

Plant pathogens, flavonoids, interactions, reviews 9815

Plant physiology (*see also* process, function or agency concerned, e.g. Photosynthesis; Plant water relations; Growth regulators)
- *Abies alba,* water stress, climate, France 4515
- *Acer pseudoplatanus,* cell culture, energy metabolism 9845
- afforestation, tree breeding, vegetative propagation, Tropics 554
- air pollution, simulation, stress factors, interactions 1974
- *Alnus rubra,* genetic variation, Canada 5478
- *Astrocaryum jauari,* flooding tolerance, Brazil 1113
- *Betula,* rootstocks, flooding tolerance 2589
- *Betula pendula,* ozone, biomass production, diurnal variation 6191
- *Betula pubescens,* buds, dormancy, plant growth regulators 3767
- broadleaves
  - carbon dioxide enrichment, drought, USA 5406
  - remote sensing 1038
  - tropical forests, light 6259
  - water stress, genotype environment interaction, USA 2206
- climatic change, plant succession, simulation 3333
- conifers
  - air pollution, reviews, field experimentation, growth chambers 5956
  - seedlings, light penetration, plant morphology, adaptation 6258
- *Erica arborea,* carbon dioxide enrichment, Italy 7031
- *Eucalyptus*
  - direct sowing, establishment, Australia, reviews 2636
  - India 3784
- *Eucalyptus camaldulensis,* shoots, growth, climate, Australia 3765
- *Eucalyptus grandis,* water stress, ethylene, chlorophyll 6301
- *Eucalyptus microtheca,* irrigated stands, provenance trials, plant water relations, Kenya 6022
- forest trees
  - air pollution
    - abiotic injuries 1154
    - ozone, drought 5325
  - carbon dioxide enrichment, France, drought 4473
  - forest ecology, climatic change, genetics, conferences 1606
  - growth models, plant competition, simulation, conferences 4179
  - salt tolerance, genetic variation, reviews 1887
  - seedlings, water stress, abscisic acid 3018
  - ultraviolet radiation, Panama 6257
  - water stress, Spain 1114
- fungal diseases, *Melampsora larici-populina, Populus,* resistance 1463
- *Juniperus occidentalis,* foliage, juvenility, USA 9791
- *Licania heteromorpha,* water use efficiency, border effects 3790
- mangroves
  - *Avicennia marina,* plant growth regulators, seedling growth 4699
  - *Rhizophora mangle,* habit, salinity, plant nutrition 465
- methodology, *Salix arctica* 3321
- mistletoes, *Phoradendron juniperinum, Juniperus osteosperma,* USA 3800

Plant physiology *cont.*
- nitrogen, metabolism, *Pinus sylvestris,* foliage, air pollution 3789
- *Picea,* seedlings, storage, thawing, recovery 6080
- *Picea abies*
  - carbon dioxide enrichment, enzymes, carbon, metabolism 459
  - forest decline, chromosome aberrations, Austria 4727
  - nutrient deficiencies, air pollution 5299
  - ozone
    - Austria 7099
    - proteins 2868
  - tree breeding, early selection, increment 1423
- *Picea mariana*
  - drought resistance, photosynthesis 5230
  - North America, reviews 4615
- *Pinus*
  - research 4684
  - shoots, plant nutrition, USA 2036
- *Pinus banksiana,* roots, drought resistance, protein synthesis 1273
- *Pinus contorta,* hydroponics, pH 4680
- *Pinus sylvestris*
  - biochemistry, stress factors, research 6494
  - seedlings, roots, outplanting 3802
- *Pinus taeda,* carbon dioxide enrichment, USA 7024
- *Populus,* foliage, movement, USA, temperature 3799
- *Populus deltoides,* foliage, drought resistance, water balance 1121
- protein synthesis, heat shock proteins, *Picea mariana,* heat tolerance, diurnal variation 9850
- *Prunus avium,* carbon dioxide enrichment, chloroplasts, biochemistry, growth 1879
- *Pseudotsuga menziesii*
  - carbon dioxide enrichment 4474
  - ozone, Netherlands 5312
- *Quercus ilex,* methodology, fluorescence 1282
- *Quercus pubescens,* remote sensing 1036
- *Quercus robur,* recalcitrant seeds 77
- *Quercus rubra*
  - air pollution, ozone, age of trees 3648
  - coppice 4687
    - USA 4686
  - ozone, microclimate 1965
- rain forests
  - border effects, methodology 3790
  - plant succession, Venezuela 6569
- remote sensing, equipment 1037
- *Salix viminalis*
  - frost injury, statistical analysis 1064
  - roots, electrical phenomena in trees 455
- *Scleronema micranthum,* water use efficiency, border effects 3790
- seasonal variation, *Pinus sylvestris,* buds, genetic regulation, genetic transformation 5404
- *Vaccinium myrtillus,* biochemistry, stress factors, research 6494
- woody plants
  - carbon dioxide enrichment, reviews 2800
  - measurement, stable isotopes 9335

Plant residues, *Fagus sylvatica,* fertilizers, soil chemistry, Germany 892

Plant succession
- *Acer rubrum,* seeds, USA 3029
- *Alnus glutinosa*
  - Russia, clear felling 5462
  - synecology, Sweden 1397
- birds
  - coniferous forests, Canada 4927
  - riparian forests, France 5824
  - secondary forests, Costa Rica 4923
- boreal forests
  - nitrogen cycle, USA 6318
  - Russia, simulation 7322
  - USA 9017

Plant succession *cont.*
- botanical composition, topography, Japan 9014
- bottomland forests, hydrology, geomorphology, Hungary 8994
- broadleaved evergreen forests, plant competition, increment, South Africa 223
- broadleaves
  - carbon dioxide enrichment, light, USA 3099
  - coppice, France 4317
  - frost resistance, New Zealand 281
  - plant nutrition, Singapore 4543
  - plant water relations, canopy gaps, Brazil 6576
  - spoil banks, natural regeneration, Japan 1741
  - understorey, USA, botanical composition 4783
- canopy, classification, Russia, theory 7013
- canopy gaps
  - old-growth forests, wind damage, USA 6567
  - seedlings, China 1395
  - tropical forests, ground vegetation, cycling, India 4785
- *Chamaecyparis thyoides*, pollen analysis, forest fires, wetlands, USA 3877
- climatic change
  - plant physiology, simulation 3333
  - simulation, Europe 8171
- climax communities
  - *Fagus sylvatica*, forest litter, decomposition, Spain 7915
  - fungi, species diversity, Japan 3142
  - *Shorea robusta*, understorey, synecology, India 522
- cloud forests, clear felling, Venezuela 5458
- coniferous forests, forest fires, USA 7136
- conifers
  - natural regeneration, Russia 1400
  - secondary forests, Japan, age structure 4325
- cycling, sandy soils, Germany 7961
- deciduous forests
  - Canada, simulation 4787
  - forest litter, USA 1911
  - ground vegetation, Poland 3943
  - Japan, stand structure 6545
  - Poland 1394
  - site factors, USA 3096
  - volcanoes, Japan 9016
- deer, *Odocoileus virginianus*, browse, USA 5827
- deforestation, land use, soil properties, Costa Rica 2154
- degraded forests, species trials, reclamation, India 6704
- *Fagus sylvatica*, synecology, Germany 9953
- fields
  - deciduous forests, France 3959
  - *Fagus sylvatica*, forest litter, Germany 2825
- fires, boreal forests, Canada 4788-4789
- forest borders, synecology, USA 3098
- forest ecology, species diversity, land use, USA 5461
- forest trees
  - classification, statistical analysis 4751
  - dunes, Netherlands 9952
  - forest ecology, plant competition, USA 7312
  - group fellings, canopy gaps, Germany 8607
  - USA 3095
- forests, Poland 1396
- *Fraxinus excelsior*, synecology, Sweden 1397
- grasslands, deciduous forests, natural regeneration, Japan, plant ecological groups 9005
- insect pests, *Altica bimarginata*, *Salix cordata*, dunes 5742
- landslides, forest trees, ferns, plant competition, Puerto Rico 3872
- *Liriodendron tulipifera*, USA, population dynamics 4810

Plant succession *cont.*
- logging, boreal forests, Canada 4788
- *Metrosideros polymorpha*
  - volcanic soils, nitrogen fixation, USA 2827
  - water stress, USA 1398
- mine spoil, USA, riparian vegetation 3950
- mixed forests
  - Netherlands, simulation 797
  - site factors, USA 3096
  - synecology, canopy gaps, USA 3101
- moraine soils, *Betula pubescens*, Norway 1404
- mountain forests
  - disturbed land, synecology, Papua New Guinea 3104
  - New Zealand 4786
- *Myrica cerifera*, islands, formation, USA 8172
- old fields
  - *Ailanthus altissima*, *Quercus*, forest litter, USA 4791
  - broadleaves
    - plant competition, USA 7308
    - USA 4794
  - deer, *Odocoileus hemionus*, *Quercus rubra*, USA 3093
  - forest trees, woody weeds, nature conservation, Japan 9019
  - indicator species, Gastropoda, France 9950
  - mountain areas, landscape, perception, Switzerland 8451
  - *Sasa senanensis*, understorey, species diversity, Japan 5463
  - wildlife, *Microtus pennsylvanicus*, forest trees, USA 5811
- old-growth forests
  - landscape, disturbance, USA 6568
  - USA, botanical composition 9951
- palaeoecology
  - forest ecology, USA 6531
  - Greece 8989
- *Picea*, boreal forests, forest fires, Canada 9949
- *Picea abies*
  - forest fires, Slovenia 5459
  - mixed forests, synecology, Poland 2164
  - nature reserves, Germany 9954
- *Pinus*, coniferous forests, soil structure, Russia 285
- *Pinus densiflora*
  - landscape
    - sociology
      - Japan 7292
      - Korea Republic 7292
  - soil chemistry, humus, Japan 7883
- *Pinus koraiensis*, mixed forests, simulation, China 5457
- *Pinus sylvestris*
  - dunes, microclimate, Netherlands 1401
  - humus
    - development, Netherlands 5260
    - soil chemistry, ground vegetation, Netherlands 6280
  - mixed forests
    - natural regeneration, Poland 8179
    - synecology, Poland 2164
- *Pinus taeda*, allelopathy, *Myrica cerifera*, light 7314
- pioneer species, broadleaves, topography, plant morphology, Japan 8765
- plant colonization
  - *Abies amabilis*, canopy gaps, Canada 542
  - broadleaves
    - biomass, Brazil, estimation 7823
    - landslides, Jamaica 4793
    - streams, salinity, USA 6565
    - wind damage, USA 277
  - deciduous forests, USA, *Lonicera maackii*, regeneration 5454
  - *Desmodium ovalifolium*, improved fallow, biomass production, Peru 3266
  - exotics, Puerto Rico 1336
  - forest plantations, dunes, Japan, *Quercus serrata* 2096

Plant succession *cont.*
- plant colonization *cont.*
  - forest roads, soil stabilization, USA, grasses 4088
  - grasslands, *Picea abies*, Italy 6566
  - *Inga edulis*, improved fallow, biomass production, Peru 3266
  - *Juniperus occidentalis*
    - history, USA 6564
    - palaeoecology, USA 9917
  - *Juniperus sabina*, soil formation, Russia 1103
  - landslides, Jamaica 6563
  - *Libocedrus chilensis*, Argentina 9015
  - old fields, *Acer rubrum*, USA 3951
  - riparian forests, *Tamarix chinensis*, plant water relations, USA 9018
  - Salicaceae, wetlands, USA 2157
  - *Salix*, peatlands, USA 9020
  - *Salix rubens*, reproductive behaviour, USA 3947
  - woody plants, simulation, *Juniperus* 3097
- primates, rain forests, Sierra Leone 1527
- *Pseudotsuga menziesii*, stumps, Collembola, Canada 4028
- *Quercus*, mountain forests, species diversity, Costa Rica 5460
- *Quercus ilex*, vegetation types, seed dispersal, birds, France 3092
- *Quercus leucotrichophora*, degraded forests, India 3254
- rain forests
  - altitude, volcanoes, USA 3103
  - plant physiology, Venezuela 6569
  - USA 7311
- reclamation
  - afforestation, deforestation, Amazonia 7557
  - mined land, USA, botanical composition 4094
- remote sensing, land use, Sweden 8404
- rights of way, forest trees, USA 7310
- riparian forests
  - flooding, Peru, geographical distribution 5467
  - mountains, India 3949
- rodents, *Castor fiber*, Netherlands, foraging 2386
- savanna woodlands, drought, simulation, Africa South of Sahara 4212
- secondary forests, synecology, species diversity, Estonia 3075
- seral stages
  - climax communities, conifers, increment, USA 4792
  - mangrove forests
    - soil properties
      - Bangladesh 284
      - India 284
  - *Pinus sylvestris*
    - Greece 541
    - Russia 4795
  - Salicaceae, wetlands, USA 2157
- simulation, forest management, forest ecology, reviews 7681
- soil formation, theory 4790
- soil properties, Russia, simulation 1402
- stand characteristics
  - simulation 5964
  - USA 3054
- stream training, riparian forests, USA 543
- trees, mined land, USA 3948
- ungulates, rain forests, Sierra Leone 1527
- vegetation, history, pollen analysis, palaeobotany, Finland 3063
- vegetation types, national parks, Korea Republic 9302
- virgin forests, dendrochronology, USA 6562
- woodlands, grazing intensity, USA 2385
- woody plants, old fields, site requirements 3102

Plant water relations
- *Acacia mangium*, seedling growth, plant growth regulators 445
- *Acer platanoides*, foliage, optical properties 1109
- *Acer saccharinum*, coppice, biomass production, USA 6096

Plant water relations *cont.*
  Acer saccharum, mulching, roots, USA 4300
  Alnus glutinosa, nitrogen fixing trees, pruning, plant composition, growth 8096
  Alnus rubra, seedling growth, photosynthesis, nitrogen fixation, temperature 1294
  Arbutus unedo, light, plant competition, Spain 8753
  Banksia, stand characteristics, forest fires, Australia 6577
  Banksia menziesii, habit, reproductive behaviour, Australia 3032
  Betula papyrifera, thinning, Canada, effects 9516
  Betula pubescens, coppice, buds, dormancy, seasonal variation 1209
  Betula tortuosa, foliage, Finland, variation 2933
  broadleaves
    air pollution 1970, 7090
    Australia 9717
    biomass production, gas exchange, plant nutrition, Spain 3793
    buds, phenology, Costa Rica 2929
    canopy gaps, plant succession, Brazil 6576
    coppice, silvicultural conversion, Italy 8935
    drought, USA, plant ecological groups 8813
    foliage
      morphology, USA 4692
      phenology, photosynthesis, Venezuela 4704
    gas exchange, French Guiana 4506
    precipitation, USA 6303
    stomatal resistance
      abscisic acid
        Germany 2083
        Israel 2083
        USA 2083
    transplanting, USA 5909
  cavitation
    Betula occidentalis, variation, measurement 3602
    Fagus sylvatica
      genetic variation, Italy 3607
      Italy, seasonal variation 7069
    forest trees, acoustic emissions, measurement 4184
    fungal diseases, *Ophiostoma querci, Quercus* 4511
    Pinus sylvestris 2841
    Quercus cerris, wood anatomy 7068
    Quercus ilex, climatic factors, geographical distribution, Sicily 3613
  Ceiba pentandra, photosynthesis, Panama, carbon 4697
  Chamaecyparis nootkatensis, planting stock, gas exchange, roots, Canada 4335
  conifers
    altitude, isotope fractionation 2834
    Italy 3615
    temperature, carbon dioxide enrichment, simulation, measurement 1609
  desiccation, bare rooted stock, planting stock, storage 6073
  drought, broadleaves, phenology, Costa Rica 2838
  drought resistance
    broadleaves
      Japan 311
      Venezuela 3594
  Eucalyptus
    hybrids, cold resistance, acclimatization, Portugal 1890
    waterlogging, salt tolerance, seedling growth, foliage 1115
  Eucalyptus camaldulensis
    Australia, plant composition, insect pests 3603
    xylem, cavitation 8806
  Eucalyptus microtheca, irrigated stands, provenance trials, plant physiology, Kenya 6022

Plant water relations *cont.*
  evaporation, *Pinus radiata,* New Zealand, seasonal variation 1124
  Fagus sylvatica, seedling growth, survival, light 3545
  forest management, plant nutrition, Australia 7826
  forest trees
    carbon dioxide enrichment, roots, plant nutrition 9670
    dielectric properties 785
    foliage, photosynthesis, Cameroon 313
    photosynthesis, diurnal variation 3783
  Fraxinus excelsior, Fagus sylvatica, natural regeneration, plant competition, Germany 9781
  Gymnocladus dioica, forest nurseries, tree guards, USA 442
  hydraulic conductivity
    Ficus, wood anatomy, life form, Panama 5373
    Pinus taeda, wind damage, wood strength, USA 1061
    roots
      measurement 310
      simulation 310
  Juniperus osteosperma, plant nutrition, nitrogen, USA 4505
  leaf conductance
    Fagus sylvatica, transpiration, microclimate, Germany 9719
    Robinia pseudoacacia, seedlings, photosynthesis, diurnal variation 2077
  leaf water potential
    forest trees, gas exchange, drought, USA 4709
    mangroves, *Avicennia germinans,* stomata, oscillation 2839
    Quercus pyrenaica, canopy, transpiration, Spain 1933
  Liquidambar styraciflua, plant competition, woody weeds, USA 1771
  mangroves 8817
  measurement, *Quercus petraea* 7070
  Mora, flooding tolerance, drought resistance, Guyana 9716
  Mora gonggrijpii, seedling growth, light, Guyana 1222
  mycorrhizas, *Leucaena leucocephala,* seedling growth 596
  osmotic pressure, *Pinus banksiana,* seedlings, nutrient deficiencies, nitrogen 7941
  Picea, planting stock, Canada, damage 905
  Picea abies
    drought, transpiration, photosynthesis, France 5279
    increment, plant nutrition, Denmark 7819
    plant nutrition, Denmark, methodology 7650
    roots 5285
    Sweden 2831
  Picea glauca × *Picea engelmannii*
    planting stock
      seedlings, Canada 1728
      somatic embryogenesis, Canada 1728
  Picea mariana, provenance, Canada 8931
  Picea rubens, photosynthesis, seedling growth, carbon dioxide enrichment, soil fertility 1293
  Picea sitchensis, air pollution, soil chemistry, UK, nitrates 5243
  Pinus banksiana, sex expression, plant nutrition, gibberellins 1318
  Pinus densiflora, nitrogen fertilizers, plant nutrition, nitrogen 2852
  Pinus edulis, plant nutrition, nitrogen, USA 4505
  Pinus monophylla, synecology, USA 8808
  Pinus ponderosa, genetic variation, drought resistance, plant morphology, USA 1889
  Pinus radiata
    aspect, New Zealand, measurement, carbon isotopes 4694

Plant water relations *cont.*
  Pinus radiata cont.
    nitrogen fertilizers, genetic variation, Australia 7752
  Pinus resinosa, nitrogen fertilizers, plant nutrition, hardening 4305
  Pinus strobus, site preparation, controlled burning, USA 1270
  Pinus sylvestris 4526
    roots, lenticels 2942
    sapwood, foliage, climate, Europe 5284
  Pinus taeda
    plant competition, woody weeds, USA 1771
    shelterwood system, microclimate, USA 5277
  plant parasitic nematodes, *Bursaphelenchus xylophilus, Pinus thunbergii* 8348
  Prosopis glandulosa, plant nutrition, nitrogen, carbon dioxide, concentration 5227
  Pseudotsuga menziesii
    air pollution 2862
    roots, soil water content, growth 1725
    soil water, Netherlands, simulation 3568
  Psychotria horizontalis, genotype environment interaction, precipitation, Panama 1880
  Quercus
    root systems, soil water, France 5280
    soil water
      France 7952
      simulation 7951
  Quercus cerris
    coppice, silvicultural conversion, Italy 8935
    photosynthesis, Italy 7194
  Quercus coccinea, air pollution, dust, photosynthesis, Greece 6331
  Quercus ilex, canopy, stand structure, Spain 2840
  Quercus robur, recalcitrant seeds, seed germination 3390
  Quercus rubra
    foliage 6299
    genetic variation, herbivores, resistance, USA 8810
  remote sensing, canopy, Brazil 1032
  riparian forests, plant colonization, *Tamarix chinensis,* USA 9018
  Salix matsudana, Japan, site factors 3599
  Salix viminalis
    foliage
      growth, plant nutrition, nitrogen 8054
      nitrogen fertilizers, growth 3803
    sap flow, Sweden 8811
  sap flow, forest trees, methodology 6304
  sclerophyllous scrub, Portugal, leaf water potential, seasonal variation 4514
  seasonal variation
    broadleaves, foliage, biomass production, India 8821
    Picea mariana, provenance, Canada 1110
    Salix viminalis, evapotranspiration, Sweden, simulation 3335
  Sequoiadendron giganteum, ozone, USA 2068
  shrubs, shoots, fire ecology, Spain 9775
  stomatal resistance, water use efficiency, *Salix viminalis,* sap flow, Sweden 8812
  Thuja occidentalis
    increment, Canada 8699
    stems, anatomy, Canada 2936
  Thuja plicata, planting stock, Canada, measurement 1723
  tropical forests, root systems, carbon cycle, Brazil 4085
  vessels
    evolution 4621
    plant ecology, Venezuela 4622
  water availability
    Pinus sylvestris, container grown plants, irrigation, growth 6077
    Psychotria, phenology, carbohydrates, Panama 7946

Plant water relations *cont.*

- water availability *cont.*
  - vegetation types, Australia 8807
- water balance
  - *Populus deltoides,* foliage, drought resistance, plant composition 1121
  - *Quercus,* dehesa grasslands, Spain 4077
- water flow resistance, *Acer* 2843
- water storage, forest trees, stems, tropical forests, Costa Rica 4521
- water stress
  - *Abies alba,* plant physiology, climate, France 4515
  - *Acacia,* seedling growth, sowing depth, temperature 4312
  - *Acacia auriculiformis,* seedling growth, Nigeria 1946
  - *Acer rubrum,* herbicides, triclopyr, uptake 9512
  - *Alnus incana,* root nodules, nitrogenase, photosynthesis 7943
  - *Anadenanthera macrocarpa,* seedling growth 1111
  - *Aningeria adolfi-friederici,* stomata, responses 5278
  - *Arbutus unedo,* Spain, growth 1937
  - *Betula occidentalis,* transpiration, USA 8805
  - broadleaves
    - genotype environment interaction, adaptation, USA 2206
    - osmoregulation 2842
    - transplanting, antitranspirants, defoliation 5286
    - waterlogging, photosynthesis, pot experimentation 4685
  - cavitation
    - forest trees, USA 4522
    - riparian forests, *Populus,* Canada 1118
  - conifers
    - fertilizers, nitrogen cycle, methodology 7646
    - seed germination 9426
  - *Copaifera langsdorfii,* gas exchange 5407
  - *Cordia africana,* stomata, responses 5278
  - *Dalbergia sissoo,* seedlings, roots, growth 314
  - *Ekebergia capensis,* stomata, responses 5278
  - *Eucalyptus,* tree breeding, selection criteria 6306
  - *Eucalyptus globulus,* genetic variation, plant physiology, Portugal 1930
  - *Eucalyptus grandis,* plant physiology, ethylene, chlorophyll 6301
  - *Eucalyptus marginata,* photosynthesis, drought resistance, Australia 1123
  - *Eucalyptus tereticornis*
    - seedling growth
      - animal manures, pot experimentation 1712
      - nitrogen-phosphorus fertilizers, pot experimentation 1712
  - Fabaceae, drought resistance 2570
  - *Fagus sylvatica*
    - light, photosynthesis, plant morphology 1929
    - ozone, shoots, growth 3022
  - *Faidherbia albida,* seedling growth, Nigeria 1946
  - forest trees
    - plant physiology, Spain 1114
    - seedlings, abscisic acid, plant physiology 3018
  - *Fraxinus excelsior,* foliage, France 1936
  - fungal diseases
    - Ascomycotina, *Pinus sylvestris,* France 1934
    - *Biscogniauxia nummularia, Fagus sylvatica,* Italy 9104
  - ground vegetation, control, soil water, growth 6907
  - hydraulic resistance, *Quercus,* measurement 4512
  - *Inga,* seed germination, seed size, chemistry 8818
  - insect pests, *Dreyfusia piceae, Abies fraseri* 5687
  - *Larix eurolepis,* somatic embryogenesis 6894
  - leaf water potential, *Quercus robur,* soil water, France 1935
  - *Liquidambar formosana,* sap flow, translocation 4507
  - *Metrosideros polymorpha,* plant succession, USA 1398
  - *Olea europaea,* stomata, responses 5278
  - ornamental woody plants, foliage, plant hairs 2829
  - *Parkinsonia aculeata,* seedling growth, root shoot ratio 1112
  - *Phoenix roebelenii,* transplanting, irrigation, defoliation 4981
  - *Picea,* photosynthesis, light 7062
  - *Picea abies*
    - air pollution, foliage, Germany 449
    - insect pests, resistance, Sweden 10032
    - nitrogen fertilizers, nutrient uptake, photosynthesis 7945
    - planting stock, site preparation, Sweden 9681
  - *Picea glauca,* cold storage, plant physiology, effects 6903
  - *Picea mariana*
    - container grown plants, gas exchange, photosynthesis 4519
    - forest nurseries, growing media, Canada 6083
  - *Picea sitchensis,* carbon dioxide enrichment, plant nutrition, seedling growth 8106
  - *Pinus*
    - gas exchange, ozone 3002
    - ultraviolet radiation, photosynthesis, Greece 7027
  - *Pinus elliottii,* planting stock, size, USA 3443
  - *Pinus halepensis,* sap flow, transpiration, Israel 7947
  - *Pinus pinaster*
    - carbon dioxide enrichment, transpiration, interactions 1928
    - roots, growth, turgor 7942
    - seed germination, provenance 9720
  - *Pinus pinea,* seedlings, control, hydrophilic polymers 9718
  - *Pinus ponderosa*
    - ozone, plant nutrition, nitrogen 8105
    - seedlings 2828
  - *Pinus strobus,* wood chemistry, carbon, USA 7660
  - *Pinus sylvestris*
    - air pollution, photosynthesis, Russia 9751
    - climate, plant morphology, UK 5222
    - dendroclimatology, Germany 10159
    - Germany 2833
  - *Pinus taeda*
    - air pollution, ozone, increment, USA 7199
    - insect pests, resistance, interactions 8338
    - plant competition, USA 166
  - *Podocarpus gracilior,* stomata, responses 5278
  - *Populus,* biochemistry 1119
  - *Populus tremuloides,* air pollution, ozone, photosynthesis 3023
  - *Prosopis chilensis,* seedlings, roots, growth 314
  - *Quercus*
    - drought resistance 4520
      - France 2830
  - *Quercus ilex*
    - drought, watersheds, Spain 1122
    - France, distribution 3610
    - photosynthesis, Italy 6256
    - UK, distribution 3610
  - *Quercus petraea,* carbon dioxide enrichment, transpiration, interactions 1928
  - *Quercus rubra,* photosynthesis, foliage, USA 1265
  - *Terminalia brownii,* forest plantations, irrigation, Kenya 3611
  - thinning, soil water, growth 6907
  - *Thuja occidentalis*
    - cavitation 7060
    - drought, transpiration, adaptation 5281-5282
  - *Tilia cordata*
    - France, distribution 3610
    - UK, distribution 3610
  - turgor, forest trees, seedlings 2845
- water uptake
  - broadleaves
    - street trees, planting 4510
    - USA, riparian forests 1108
  - coastal plant communities, USA, isotope fractionation 2836
  - conifers, Sweden, tracers 8814
  - *Eucalyptus,* methodology, isotopes 3322
  - *Eucalyptus camaldulensis*
    - flooding, Australia 2837
    - hydrology, Australia 8809
  - *Eucalyptus viminalis,* soil water regimes, seedling growth, pot experimentation 3595
  - *Populus interamericana,* canopy, transpiration, USA 1932
  - *Quercus,* sap flow, measurement 4523
  - rain forests, forest trees, Panama 5283
  - *Rhizophora mangle,* habit, USA 3609
  - saline water, *Eucalyptus camaldulensis,* Australia 3616
  - *Sloanea woollsii,* Australia 7944
  - sources 2835
- water use
  - amenity trees
    - transpiration, USA 8804
    - USA 7059
  - estimation, *Eucalyptus camaldulensis,* Australia 4079
  - *Eucalyptus,* leaf area, equations, theory 7667
  - *Eucalyptus tereticornis,* fuel plantations, water conservation, India 699
  - *Fraxinus excelsior,* air pollution, ozone 2881
- water use efficiency
  - *Acer saccharum,* defoliation, photosynthesis, insect pests 1477
  - *Eucalyptus,* measurement, techniques 9345
  - *Eucalyptus grandis,* growth models, soil water, South Africa 9355
  - forest trees, altitude, North America 4513
  - *Larix occidentalis,* genetic variation, USA, growth 1274
  - multipurpose trees, fuel plantations, irrigated stands, Kenya 6021
  - *Prunus avium,* tree guards, photosynthesis 4689
  - *Quercus,* photosynthesis, plant nutrition, USA 6483
  - seasonal variation, *Salix viminalis,* biomass production, Sweden 3604

Plantations (*see* Forest plantations)

Planting (*see also* Spacing)

- beating up, work study, Canada 7771
- broadleaves
  - irrigation, saline water, Spain 160
  - street trees, water uptake 4510
- design, landscape, books 6752

Planting *cont.*
- establishment, *Prosopis cineraria,* seed germination, soil properties, India 4336
- *Eucalyptus camaldulensis,* Australia, tree guards, mulching 2637
- *Eucalyptus globulus,* machinery, Chile 959
- forest economics, profits, analysis 3529, 7016
- forest trees
  - Germany, conferences 5940
  - Tropics, books 5933
- *Fraxinus pennsylvanica,* roots, soil texture, growth 2056
- group planting
  - *Quercus*
    - Germany 9499
    - thinning, Poland 6107
- machinery, work study 8670
- *Madhuca longifolia,* reclamation, waste land, India 1539
- multipurpose trees, rangelands, soil types, Tunisia 8420
- *Picea,* artificial regeneration, site preparation, Canada 9508
- *Pinus banksiana,* Canada, insect pests, damage 2359
- *Pinus koraiensis,* thinning, Korea Republic, growth 8656
- *Pinus resinosa,* weed competition, grasses, USA 6123
- pits, *Cassia siamea,* nitrogen-phosphorus fertilizers, soil degradation, India 8627
- productivity, site preparation, slash 6117
- *Quercus,* planting stock, Germany 9497
- *Quercus rubra,* tree guards, USA 937
- seedling growth, *Rhizophora apiculata,* mangrove forests, estuaries, India 6113
- *Shorea johorensis,* Indonesia 1790
- soil treatment
  - *Pseudotsuga menziesii*
    - mycorrhizas, USA 3156
    - soil biology, USA 3156

Planting season
- bamboos, *Bambusa tulda,* irrigation, India 2673
- *Pongamia pinnata,* sodic soils, India 6115
- *Terminalia arjuna,* sodic soils, India 6115

Planting stock
- bare rooted stock
  - broadleaves, UK 2635
  - cold storage, *Pinus caribaea* 6906
  - *Fraxinus pennsylvanica,* USA, survival, growth 4309
  - grading
    - *Pinus sylvestris*
      - Finland
        - morphology 9471
        - variation 9471
  - lifting, *Picea glauca,* plant composition 1722
  - morphology, quality, *Pinus sylvestris,* Finland 902
  - *Quercus douglasii,* USA, mortality, growth 1720
  - size, *Pinus elliottii,* water stress, USA 3443
- broadleaves
  - forest nurseries 6072
  - tissue culture, culture media 5073
- canes and rattans, *Calamus manan,* survival, growth, mycorrhizas 975
- *Chamaecyparis nootkatensis,* gas exchange, plant water relations, roots, Canada 4335
- cold storage, conifers, roots, frost resistance 3558
- conditioning
  - *Thuja plicata*
    - frost resistance, Canada, plant morphology 1724
    - plant physiology, Canada, measurement 1723
- conifers, cold storage, research, reviews 4310

Planting stock *cont.*
- container grown plants
  - broadleaves, UK 2635
  - cold storage, boxes, Canada 5119
  - forest nurseries
    - growing media
      - reviews 9472
      - Scandinavia 9472
  - *Fraxinus pennsylvanica,* USA, survival, growth 4309
  - *Pinus contorta,* roots, Canada, growth 2046
  - *Pinus taeda*
    - weed control
      - USA
        - growth 1747
        - mortality 1747
  - *Pseudotsuga menziesii,* roots, Canada, growth 2046
  - *Quercus laurifolia,* roots, morphology, growth 1733
- establishment, *Brosimum alicastrum,* seed collection, Jamaica 2621
- *Eucalyptus grandis,* USA 878
- explants, *Pinus eldarica,* increment, USA 1688
- grading, morphology, *Pinus radiata,* artificial regeneration, South Africa 182
- heat stress, *Picea mariana,* plant composition, ethanol, measurement 9338
- lifting, *Cornus florida,* USA 1732
- marketing, Germany 9478
- micropropagation, seedlings, *Betula pendula,* increment, Finland 7766
- mortality, *Pinus radiata,* artificial regeneration, South Africa 183
- mycorrhizas, *Laccaria bicolor, Pinus pinaster,* forest soils, bioassays 5574
- outplanting, trials, experimental design 28
- performance, *Betula pendula,* tissue culture, micropropagation, light 6056
- *Picea*
  - plant water relations, Canada, damage 905
  - seedling growth, Canada, damage 905
- *Picea abies,* water stress, site preparation, Sweden 9681
- *Picea glauca* × *Picea engelmannii*
  - seedlings
    - frost resistance, increment, morphology 1726
    - physiology, Canada 1728
    - quality 1727
  - somatic embryogenesis
    - frost resistance, morphology 1726
    - physiology, Canada 1728
  - tissue culture, somatic embryogenesis, quality 1727
- *Pinus palustris,* grading, bare rooted stock 910
- *Pinus ponderosa,* plant competition, USA 4329
- *Pinus taeda,* USA, floodplains 5127
- production, *Azadirachta,* Thailand 2622
- protection
  - *Acacia greggii,* reclamation, USA 6712
  - *Pinus echinata,* USA 6084
  - *Pinus palustris,* USA, mortality 2624
- quality, conifers, cytology, methodology 5005
- *Quercus,* planting, Germany 9497
- *Quercus alba,* reclamation, mine spoil, USA 5849
- *Quercus rubra*
  - genetic variation, USA 5112
  - roots, USA, morphology, grading 6078
- requirements, forest management, Germany 9481
- root pruning
  - *Abies alba,* root systems, Germany 6109
  - *Grevillea robusta,* forest nurseries, India 145
  - *Quercus robur,* seedling growth, root systems 3424

Planting stock *cont.*
- roots, forest litter, Canada, morphology 6900
- seedlings
  - *Casuarina equisetifolia,* NPK fertilizers, India 1721
  - *Pinus eldarica,* increment, USA 1688
  - *Tectona grandis,* NPK fertilizers, India 1721
- shoot cuttings
  - storage
    - *Cornus sericea*
      - carbohydrates 138
      - plant growth regulators 138
- stecklings, *Chamaecyparis nootkatensis,* plant physiology, photoperiod, temperature 3563
- storage
  - bare rooted stock, plant water relations, desiccation 6073
  - *Picea glauca,* temperature, Canada 6079
  - temperature, conifers, frost resistance 6087
- stumps
  - production, *Dalbergia sissoo,* forest nurseries, Pakistan 6074
  - *Santalum album,* NPK fertilizers, India 1721
- survival, growth, *Acacia mangium,* plant growth regulators, treatment 445
- treatment, *Juglans regia,* UK, growth 5125
- types, survival, growth, *Populus deltoides,* India 155

Platanus
- bacterial diseases, *Xylella fastidiosa,* USA 8314
- fungal diseases
  - *Ceratocystis fimbriata*
    - Europe, spread 8299
    - street trees, Europe 5646
  - *Nectria cinnabarina,* USA, chemical control, testing 2293
- insect pests, *Phyllonorycter platani,* UK, spread 7460
- palaeoecology, wood anatomy, West Asia 1348
- urban forestry, amenity trees, Germany 2432

Platanus acerifolia
- buds, dormancy, composition, carbohydrates 3761
- crown, morphology 404
- diseases, Poland 5618
- fungal diseases
  - *Apiognomonia veneta,* USA, disease resistance 2284
  - *Ceratocystis fimbriata*
    - histology, defence mechanisms 2268
    - seedlings, histochemistry 2275
  - *Coriolus versicolor,* injuries, inoculation 8290
  - *Fomes fomentarius,* injuries, inoculation 8290
  - *Microsphaera penicillata,* USA, disease resistance 2284
- pollarding, Germany 7607
- pests, Poland 5618
- plant disorders, Poland 5618
- pollen, ontogeny 5380
- pruning, France, carbohydrates, distribution, seasonal variation 5393
- root systems
  - morphology 404
    - development 7164
- shoot cuttings, cutting date, rooting 4283
- street trees
  - Italy, Arachnida, surveys 10025
  - microclimate, noise abatement, China 10156
  - salt injury, UK 346
- tissue culture, buds, micropropagation 5084

Platanus kerrii, wood anatomy 8070

Platanus occidentalis
- bark, thickness, fire resistance, USA 1197
- carbon dioxide enrichment, drought, plant physiology, USA 5406

Platanus occidentalis *cont.*
  forest nurseries, container grown plants, roots 4137
  forest plantations, wood chemistry, USA 8919
  fungal diseases, foliage, infection 5651
  nutrient reserves, USA, bottomland forests 3626
  planting stock, forest nurseries 6072
  seed longevity, storage 3381
  shoot cuttings, soil toxicity, aluminium, growth 9710
  stand characteristics, growth models, USA, forecasting 4221
Platanus orientalis, air pollution, heavy metals, indicator plants, Greece 7106
Platycarya strobilacea
  bark, Japan, chemistry, tannins 6462
  crown, Japan, branches, development, morphology 9795
  fruits, Japan, chemistry, tannins 6462
Platymiscium pinnatum, wood anatomy 4629
Platymiscium yucatanum, rain forests, Mexico, wood anatomy 1211
Platypus, insect pests, *Nothofagus solandri*, New Zealand 6297
Platypus cylindrus, insect pests, *Quercus suber*, Portugal 7464
Platypus sulcatus, insect pests, Argentina 2301
Plecotus townsendii, Chiroptera, USA, ecology 3208
Ploioderma hedgcockii, fungal diseases, *Pinus elliottii*, USA, histopathology 8310
Plus trees
  forest trees, progeny testing, genetic gain 2177
  Pinus sylvestris, crown, tree breeding, phenotypic selection, Finland 7345
  selection, *Pterocarpus indicus*, progeny testing, genetic variation, Indonesia 6595
Pneumatophores, mangroves, *Avicennia marina*, gas exchange 2041
Podocarpaceae
  foliage, morphology, palaeobotany, taxonomy, Australia 497
  mixed forests, seed dispersal, fruits, New Zealand 486
  rain forests, light, synecology, New Zealand 271
Podocarpus, choice of species, forestry development, South America 2551
Podocarpus coriaceus, gas exchange, light, Guadeloupe, adaptation 4682
Podocarpus falcatus
  agroforestry, species trials, Rwanda 4961
  reproductive behaviour, fruits, South Africa 3836
Podocarpus gracilior, water stress, stomata, responses 5278
Podocarpus hallii, marsupials, *Trichosurus vulpecula*, remote sensing, New Zealand, damage 471
Podocarpus latifolius
  broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223
  reproductive behaviour, fruits, South Africa 3836
Podocarpus nubigenus
  deforestation, nature conservation, Chile 3253
  foliage, frost resistance, Chile, lipids 274
  rain forests, seed size, recruitment, Chile 7258
Podocarpus salignus
  deforestation, nature conservation, Chile 3253
  foliage, frost resistance, Chile, lipids 274
Podocarpus totara
  provenance trials, seedling growth, stem form, New Zealand 69
  silviculture, New Zealand 3426
Podosesia aureocincta, insect pests, *Fraxinus pennsylvanica*, biological control, USA, entomophilic nematodes 4897
Poga, mangroves, epidermis, morphology, taxonomy, Nigeria 3724
Poisonous plants, *Acacia berlandieri*, foliage, chemistry, USA 9823
Poland
  Abies, silvicultural conversion, management 952
  Abies alba, increment, geographical distribution 1009
  Betula
    provenance trials, air pollution, tolerance 1150
    species trials, air pollution, tolerance 1150
  Betula obscura, distribution, synecology, taxonomy 1337
  birds, *Dendrocopos leucotos*, mixed forests, national parks 4064
  broadleaves, plant morphology, habit, taxonomy 1207
  Carpinus betulus, degraded forests, synecology, national parks 2140
  conifers, plant morphology, habit, taxonomy 1206
  Cornus mas, seed germination, seed treatment 857
  deciduous forests
    ground vegetation, plant succession 3943
    plant succession 1394
    stand structure, spatial distribution, plant competition 3108
  deer, *Cervus dama*, *Pinus sylvestris*, damage, assessment 4049
  degraded forests, site types, increment, amelioration of forest sites 4089
  Fagus sylvatica
    air pollution, forest decline 2873
    silviculture, heartwood, formation, prevention 1180
  forest administration, history 1625
  forest economics
    forest policy 2773-2774
    stumpage value, equations 1869
  forest litter
    pollution, radionuclides, fallout 5306
    respiration, nutrients, air pollution, heavy metals 8798
  forest plantations, fertilizers, sewage, industrial wastes 899
  forest policy, greenhouse effect, climatic change 2797
  forest trees
    air pollution, increment, dendrochronology 7612
    fertilizers, irrigation, soil chemistry 137
    forest litter, decomposition, chemistry 7901
    natural regeneration
      stand characteristics, botanical composition, climatic change 7330
      stand structure, botanical composition, development 7329
    plant morphology, habit, taxonomy 1322
    taxonomy, plant morphology, habit 2114-2115
  forestry
    bibliographies 1602
    history 5976-5977
    research
      bibliographies 761
      organizations, bibliographies 6792
    statistics 9379
  forests
    air pollution
      forecasting 1956
      forest economics 1959
      heavy metals, soil biology 343
    ecotypes, regionalization, forest management, planning 7285
    national parks, synecology, maps 2139
    plant succession 1396
    synecology, species diversity, soil pH 7284
  Fraxinus excelsior, seed dormancy, seed treatment 6875
  fungal diseases
    Ceratocystis, *Quercus robur*, forest decline, control 1299
Poland *cont.*
  fungal diseases *cont.*
    Heterobasidion annosum, *Pinus sylvestris*, resistance, natural regeneration 1454
    Ophiostoma roboris, *Quercus robur* 7398
  insect pests
    Cephalcia, *Picea abies*, chemical control 7499
    Cephalcia fallenii, *Picea abies* 7488
    Hymenoptera, *Pinus sylvestris*, chemical control 7499
    Megastigmus spermotrophus, *Pseudotsuga menziesii*, chemical control 2376
    Picea abies, cones, parasitoids 2304
    Pinus sylvestris, foliage, damage, assessment 4030
    Tortrix viridana, *Quercus robur*, forest decline 1299
  Larix
    provenance, bark, monoterpenes, variation 1428
    species trials, provenance trials 827
  Larix decidua
    inbreeding 7209
    pruning, knots, wood properties, diameter 1983
  Ledum palustre, nature conservation 1576
  legislation, forest economics, forest policy 2528
  Malus sylvestris, seed germination, seed treatment, storage 849
  mites, *Eurytetranychus buxi*, *Buxus sempervirens* 2370
  mixed forests
    increment, recruitment, mortality 2163
    stand structure, spatial distribution, plant competition 3108
  Ostrya carpinifolia, seed germination, seed treatment 856
  Picea, silvicultural conversion, management 952
  Picea abies
    branches, oils, production 7171
    crown, oils, production 7171
    genetics, isoenzymes 5483
    grafting
      seed orchards
        flowering, clonal variation 841
        mortality, clonal variation 841
    grafts, shoots, nutrients, flowering 1132
    increment, equations, height 6976
    mixed forests, synecology, plant succession 2164
    plant nutrition, provenance trials, genetic variation 1131
    provenance trials
      age, site factors 829
      diameter, increment, drought 830
      progeny testing, artificial selection 2179
    reclamation, stony soils, mountain areas 3440
  Pinus, mixed forests, quality, understorey 1816
  Pinus mugo × *Pinus sylvestris*, genetic variation, isoenzymes, population genetics 9976
  Pinus sylvestris
    age, photosynthesis, crown, light 1278
    air pollution
      forest decline 2873
      mapping, monitoring 1153
    basal area, measurement, sample plot technique 993
    fertilizers, Carabidae 7416
    flowering, induction, pruning, gibberellins 1317
    foliage
      measurement, canopy, insolation 3474
      roots, microbial flora 7382
      waxes, air pollution, damage 1227
      weight, canopy, insolation 3475

- **Poland** *cont.*
  - *Pinus sylvestris cont.*
    - forest litter, decomposition, air pollution 7050
    - form factors, diameter, height 994
    - height, wood properties, equations 3681
    - mixed forests
      - natural regeneration, synecology 8179
      - synecology, plant succession 2164
    - population genetics
      - cones, variation 7349
      - foliage, variation 7350
      - habit 9975
    - provenance, bark, monoterpenes, variation 1427
    - provenance trials 837, 3365
      - age, site factors 828
      - air pollution, increment 6030
      - IUFRO 831
    - pruning
      - knots, wood properties, diameter 1983
      - selection methods, work study 6130
    - resin tapping
      - scars, microbial flora, fungi 1441
      - wood properties, quality, research 1984
    - seed orchards, genetic variation, isoenzymes, population genetics 1426
    - shelterwood system, natural regeneration, site preparation 6918
    - shoots, weight, canopy, insolation 3475
    - underplanting, broadleaves 3461
    - wood properties, vegetation types 4596
  - *Platanus acerifolia*
    - diseases 5618
    - pests 5618
    - plant disorders 5618
  - *Populus*
    - forest plantations, increment 936
    - shoot cuttings, air pollution, heavy metals, tolerance 7085
  - protection of forests, forest administration 3343
  - *Pseudotsuga menziesii,* genetic variation, isoenzymes 5485
  - *Pyrus communis,* seed germination, seed treatment, storage 849
  - *Quercus*
    - direct sowing, thinning 6107
    - forest decline, symptoms, precipitation 1298
    - forests, synecology 1380
    - group planting, thinning 6107
  - *Quercus petraea,* wood anatomy, growth rings 4636
  - *Quercus robur*
    - degraded forests, synecology, national parks 2140
    - forest decline
      - drought
        - fungal diseases 1299
        - insect pests 1299
    - wood chemistry, heavy metals, air pollution, forest decline 7095
  - reclamation, afforestation, peatlands 714
  - synecology, man, riparian forests, riverside plantations 1175
  - *Syringa vulgaris,* tissue culture, micropropagation, culture media, growing media 6882
  - *Taxus baccata,* genetic variation, population genetics 8207
  - ungulates, forest trees, forest management, national parks 4058
  - virgin forests, lichens, carotenoids, indicator plants 7300
  - wildlife
    - *Alces alces,* broadleaves, browse, forests 7534-7535
    - deciduous forests, population dynamics 4917
  - woodland grasslands, botanical composition 9010
- **Poland** *cont.*
  - woodlands, national parks, synecology, maps 1377
- **Polders,** afforestation, reclamation, Netherlands 1537
- **Policy** (*see* Forest policy; Forestry development)
- **Politics,** conferences 765
- **Pollarding**
  - *Fagus sylvatica,* UK, growth, mortality 5151
  - fungal diseases, *Platanus acerifolia,* Germany 7607
- **Pollen**
  - *Abies,* palaeobotany, Japan, DNA 9914
  - allergens
    - air pollution, South Africa 9409
    - *Betula,* Finland 1650
    - *Betula pendula,* gene expression 5542
    - broadleaves, Japan 5046
    - *Cryptomeria japonica* 6008
    - *Cupressus sempervirens,* France 54
    - dispersion, *Cryptomeria japonica,* simulation, Japan 7217
    - glycoproteins, *Prosopis juliflora* 1243
    - house dust, *Betula pendula,* Finland 7711
    - Italy 6006
    - localization, *Cryptomeria japonica* 3737
    - *Morus alba* 6442
    - Oleaceae 7177
  - amino acids, *Larix decidua,* Slovakia 3750
  - anatomy, morphology, *Averrhoa* 7158
  - atmosphere, Spain, urban areas, botanical composition, variation 3069
  - botanical composition, Turkey 8124
  - conifers, genetic transformation 7355
  - consumption, mites, *Proctolaelaps kirmsei, Hamelia patens,* Costa Rica 10052
  - contamination, *Larix laricina,* seed orchards, Canada 4269
  - development
    - *Acer nigrum* 2018
    - conifers, Finland, forecasting, heat sums 9872
    - *Picea,* Russia, heat sums 5422
  - dispersal, *Cryptomeria japonica,* temperature, Japan 4729
  - forest trees, vegetation, simulation, USA 4805
  - Hamamelidae, phylogeny, hydroxycinnamoyl spermidines 8234
  - immunoprecipitation tests, *Quercus,* chemotaxonomy 423
  - induction, *Pinus taeda,* tree breeding, techniques 9876
  - maturation, conifers, temperature, Canada 6038
  - morphology
    - *Burretiodendron* 2052
    - conifers, pollination 4645
    - *Dysoxylum,* taxonomy 2039
    - Fabaceae, Sophoreae, taxonomy 8902
    - histochemistry, *Betula pendula* 9796
    - Nigeria 7216
    - *Picea,* Russia 8059
    - rain forests, India 3293
    - *Stryphnodendron,* taxonomy 393
    - Styracaceae, taxonomy 392
  - ontogeny
    - *Chamaecyparis lawsoniana* 5379
    - *Platanus acerifolia* 5380
    - *Ziziphus loti* 5381
  - *Picea glauca,* genetic transformation, embryos, techniques 2196
  - *Pinus sylvestris*
    - Finland, viability, seasonal variation 9874
    - gene flow, Sweden 5509
    - genetic variation, Sweden 6588
  - *Pseudotsuga menziesii,* seed orchards, mating systems, France, dispersal 9039
  - release, *Streblus brunonianus,* Australia 1312
  - seasonal variation
    - *Picea mariana,* seed orchards, Canada 5423
- **Pollen** *cont.*
  - seasonal variation *cont.*
    - *Pinus sylvestris,* Finland 2112
  - seed orchards, techniques, reviews 9428
  - spread, ornamental woody plants, Italy, coastal areas 5912
  - storage
    - germination, *Juglans regia* 2109
    - *Pseudotsuga menziesii,* seed germination, physiology 2103
  - viability
    - dispersal, *Abies pinsapo,* reproductive behaviour, Spain 489
    - *Libocedrus chilensis,* age of trees, Argentina 6510
- **Pollen analysis**
  - *Araucaria angustifolia,* geographical distribution, climate, Brazil 2129
  - atmosphere, *Betula,* deciduous forests, Norway 475
  - Betulaceae, palaeoecology, USA 3888
  - *Bursera microphylla,* palaeobotany, Mexico 8147
  - *Chamaecyparis thyoides,* forest fires, wetlands, plant succession, USA 3877
  - deforestation, vegetation, history, UK 4763
  - dispersal, forests, mosses, USA 3040
  - forest trees, vegetation, history, Austria 7261
  - *Fouquieria columnaris,* palaeobotany, Mexico 8147
  - Japan 9915
  - *Lophira alata,* rain forests, history, Cameroon 2130
  - mangroves, *Avicennia marina,* palaeoecology, New Zealand 4759
  - mixed forests, palaeoecology, USA 8992
  - palaeoecology
    - Mexico 8147
    - vegetation, history, UK 3062
  - *Picea abies,* palaeoecology, Sweden 3068
  - *Sacoglottis gabonensis,* rain forests, history, Cameroon 2130
  - tropical forests
    - palaeoecology
      - Africa 3067
      - South America 3067
  - vegetation
    - climate, history, USA 513
    - history
      - carbon cycle, Europe 2125
      - climate, New Zealand 3886
      - climatic change, Canada, simulation 2124
      - conferences 17
      - palaeoecology
        - simulation, theory 2128
        - Spain 2133
      - plant succession, palaeobotany, Finland 3063
    - palaeoecology, UK 8145
  - vegetation types, history, Sweden 509
- **Pollen germination**
  - *Abies alba,* air pollution, Slovakia 488
  - *Betula pubescens,* pollination 3039
  - conifers, biochemistry 4647
  - *Pinus,* air pollution, Slovakia 7212
  - *Pinus densiflora* 2108
  - *Pinus thunbergii* 2108
  - *Pinus yunnanensis,* metabolic regulators 485
  - plant growth regulators, *Eucalyptus tereticornis* 2095
- **Pollination**
  - *Adansonia,* flowers, morphology 6512
  - beneficial insects, coevolution, *Ficus hispida,* India 8956
  - *Betula pubescens,* pollen germination 3039
  - *Bombacopsis quinata,* seed orchards, Colombia 1685
  - *Bruguiera hainesii,* Peninsular Malaysia, birds 1315
  - conifers
    - pollen, morphology 4645
    - seed orchards, Canada, methodology 9873
  - contamination, *Pseudotsuga menziesii,* seed orchards, Canada 4813

Pollination *cont.*
  cross pollination, isoenzymes, *Picea sitchensis* 3028
  Cupressus sempervirens, progeny testing 5510
  Daniellia pynaertii, monkeys, Zaire 4737
  fertilization
    Agathis australis 8948
      cytoplasmic inheritance 9884
    Picea abies, Sweden 2107
  forest trees
    Apidae, Argentina, landscape ecology 1470
    Argentina, forest ecology, fragmentation 4954
    genetic diversity, air pollution, climatic change, reviews 5424
  Gnetum, Sarawak 8951
  insects
    Acacia, Senegal 3842
    Faidherbia albida, Senegal 3842
    Prosopis cineraria, India 5675
    tree breeding, breeding programmes, experimental design 3971
    Zamia furfuracea, cones, sex 3835
  Larix occidentalis, seed development, seed production 1319
  Leptospermum, flowers, anatomy 2033
  mating systems, *Fagus sylvatica,* France, outcrossing 4730
  outcrossing
    Abies alba, genetic variation, isoenzymes, Italy 5511
    Picea abies, seed orchards, genetic variation, Sweden 9969
    Shorea, Sri Lanka 3034
  Picea glauca, seed orchards, population genetics, Canada 564
  Pinus pinaster, gene mapping 8228
  Pinus sylvestris
    seed orchards
      Sweden, management 9875
      tree breeding, Sweden 5500
  Populus, flowers, abscisic acid, measurement 1313
  Pseudotsuga menziesii, seed set 8128
  self pollination
    Bambusa bambos, albinos 8954
    cross pollination, *Picea abies,* Canada 2105
    Pinus leucodermis, Italy 3974
    Thuja plicata, Canada 2110
  Swietenia mahagoni, insects, USA, Thysanoptera 9129
  techniques, *Pinus sylvestris,* seed orchards, Sweden 3134
  tropical forests, Apidae, conservation, Brazil 6643
  wind, tropical forests, flowers, morphology 3036
Pollinators, *Ficus,* Indonesia 3037
Polluted soils
  oilfields, species trials, reclamation, Russia 4950
  reclamation, landscape, Italy 3247
Pollution
  Cecropia glazioui, wood anatomy, Brazil 6325
  fallout
    forest fires, Russia, Ukraine, Belarus 9736
    forest influences, forestry workers, Russia, Ukraine 8829
  forest litter, radionuclides, fallout, Poland 5306
  soil properties, Lithuania, monitoring 8796
  vehicles, street trees, seedling growth, seeds, Pakistan 10155
Pollution control, agroforestry, riverbank protection, buffer zones, USA 9273
Polyalthia longifolia, multipurpose trees, fibre plants, India 2678
Polydrusus ruficornis
  insect pests
    Betula tortuosa
      Russia
        damage 8336
        ecology 2351
Polygonia c-album
  insect pests
    Ulmus glabra
      biology 648
      host specificity 648
Polylepis besseri, mountain forests, Bolivia 9920
Polylepis incana, chemotaxonomy, South America 5436
Polylepis tomentella, mountain forests, Bolivia 9920
Polyploidy (*see* Chromosomes; Genetics, ploidy; Tree breeding, ploidy)
Polyporus versicolor (*see Coriolus versicolor)*
Polyscias fulva, agroforestry, species trials, Rwanda 4961
Polystictus versicolor (*see Coriolus versicolor)*
Pometia pinnata, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287
Pongamia pinnata
  forest plantations, forest influences, soil chemistry, lateritic soils, India 8023
  fungal diseases, Pakistan, seeds 2257
  insect pests
    Ascotis imparata, India 10041
    India, biological control 5806
    Pakistan, seeds 5679
  parasitic plants, *Santalum album,* increment, India 186
  planting season, sodic soils, India 6115
  reclamation, mined land, species trials, India 3246
  seed weight, nutrients, seedling growth 9438
  shoot cuttings, India 872
  species trials
    mangrove forests, Bangladesh 6017
    reclamation
      fly ash, India 9248
      mine spoil, India 2404
      sodic soils, India 712
Population dynamics, rain forests, canopy gaps, simulation, Panama 5466
Population pressure, forest management, India 6205
Populus
  afforestation
    agricultural land
      forest economics
        Italy 158
        subsidies, Italy 159
  agroforestry
    Argentina 1567
    soil water, microclimate, Canada 9278
  bacterial diseases
    Kazakhstan, disease vectors, *Rhamnusium gracilicorne* 10019
    Pseudomonas syringae, Sweden 8317
    Xanthomonas, clones, resistance, Netherlands 1465
    Xanthomonas populi, Belgium, research 611
  biomass production, energy, conferences 4999
  birds, short rotation forestry, Germany 7540
  canopy, remote sensing, USA, reflectance, computer techniques 3525
  choice of species, site types, Russia 65
  clones
    molecular genetics, techniques 3998
    species trials, breeding programmes, India 577
    variety trials, India 62
  farm forestry, land use, agricultural land, Italy, economics 6245
  fertilizers, irrigation, soil chemistry, Poland 137
  foliage, morphology 5385
  forest decline, France 3817
  forest fires, fire danger, fuels, soil water, Canada 8030
  forest plantations, increment, Poland 936
  forest resources
    Canada 4241
    forest economics, USA 813
Populus *cont.*
  fungal diseases
    Ceratocystis fimbriata, clones, disease resistance, plant physiology 7404
    Italy, integrated control, techniques 8319
    Melampsora, Belgium, research 611
    Melampsora larici-populina, France, identification 10013
    Nectria cinnabarina, USA, chemical control, testing 2293
    Portugal, control 7411
    Valsa sordida, frost resistance, genetic variation 10009
  genetic variation, Italy, wood properties 6604
  hybrids, explants 9447
  increment, height, diameter, equations, Argentina 790
  insect pests
    Anacampsis populella, air pollution, Russia 649
    Chrysomela scripta, USA, genetic diversity 9172
    Germany 7430
    Lepidoptera, genetic engineering, resistance 5724
    Lymantria dispar, biological control, foliage, chemistry 9192
    Malacosoma disstria, clones, defoliation, resistance 3182
    Paranthrene tabaniformis
      galls, Bulgaria, ecology 643
      Italy, monitoring, chemical control 6652
    Rhamnusium gracilicorne, Kazakhstan, disease vectors, bacterial diseases 10019
  insects, Coleoptera, linear plantations, Germany, ecology 2298
  landscape, water management, USA 7549
  plant composition, propolis, Temperate Zones 1232
  riparian forests, agroforestry, USA, agricultural land 3269
  shelterbelts, agricultural land 2402
  shoot cuttings, weed control, France, herbicides 8632
  short rotation forestry
    canopy, light penetration, simulation 4213
    France 6913
      site factors 6912
    growth models, photosynthesis, USA 1619
    land use, abandoned land, Italy 6136
    stand density, spacing, methodology, estimation 2207
    subsidies, Italy, setaside 1640
  silviculture, statistics, Italy 6135
  soil amendments, composts, paper mill sludge, USA 7764
  soil chemistry, cation exchange capacity, Canada 5250
  tissue culture
    lignification
      enzymes 5401
      water stress 4677
  variety trials, India 1654
  voles, *Clethrionomys glareolus,* Germany, trapping 3212
  volume determination, remote sensing, radar, Netherlands 3518
  wind damage, Netherlands 1062
  wood properties, wood anatomy, methodology, boring 2494
  yield tables, UK 4416
Populus acerifolia, buds, street trees 6422
***Populus* 'Agathe F',** plant competition, Netherlands, growth 6938
Populus alba
  air pollution, heavy metals, indicator plants, Greece 7106
  cell culture
    biotechnology, methodology 9336
    enzymes, plant growth regulators 4701
    xyloglucans 9834
  fungal diseases, *Phellinus pilatti,* Italy, damage, new species 10006

Populus alba cont.
- insect pests, *Paranthrene robiniae,* USA, insecticides 5792
- lignin, biosynthesis, cell walls, peroxidases 1246
- mycorrhizas, *Tuber magnatum,* Italy 6609
- plant physiology, remote sensing 1038
- reclamation
  - landfills
    - species trials
      - plant nutrition, UK 4948
      - UK 4947
- synecology, Russia 4780
- tissue culture, callus, light, chemistry 6487

***Populus alba* × *Populus* 'Crandon',** genetic transformation, herbicide resistance, glyphosate, photosynthesis, increment 6605

Populus angustifolia
- hybrids, insect pests, USA 6594
- insect pests
  - *Chaitophorus,* interactions, Formicidae 5754
  - *Chrysomela confluens,* damage, ecology 5754
- natural regeneration, vegetative propagation, Canada 6507
- plant nutrition, iron, waterlogging, USA 3638
- riparian forests, water stress, cavitation, Canada 1118

***Populus angustifolia* × *Populus fremontii*,** hybrids, insect pests, *Chrysomela confluens,* ecology 5754

***Populus* 'Astria',** ground vegetation, short rotation forestry, Germany 6554

Populus balsamifera
- forest fires, treelines, global warming, Canada 3700
- insect pests, *Papilio canadensis,* USA 5712
- mined land, Germany, clay soils 1538
- natural regeneration, vegetative propagation, Canada 6507
- nitrogen cycle, plant succession, USA 6318
- remote sensing, radar, USA, seasonal variation 2755
- riparian forests, water stress, cavitation, Canada 1118
- stand development, Canada 6579
- wood anatomy, tyloses, suberin 7160

***Populus* 'Bassendean',** increment, stem form, Australia 7716

***Populus* 'Beaupré'**
- biomass production, photosynthesis, France 4401
- canopy, development, plant competition 7381
- carbon dioxide enrichment, biomass production, photosynthesis, Belgium 8112
- coppice, silviculture, France, biomass production 149
- mycorrhizas, *Glomus mosseae,* roots, longevity 10000
- short rotation forestry, height, Western Europe, border effects 8700

Populus canadensis
- air pollution, ozone, biomass production 3654
- bark, pectins, France, seasonal variation 3757
- carbon dioxide enrichment, soil fertility, USA 5228
- deer, *Cervus,* browse, New Zealand 9226
- foliage, ozone, deposition 1171
- forest influences, water pollution, riparian vegetation 3692
- forest plantations, biomass production, increment, forest litter, Pakistan 9591
- genetic variation
  - chloroplast genetics 7371
    - hybrids 7372
- insect pests, *Paranthrene robiniae,* USA, insecticides 5792
- plant morphology, genetic variation, tree breeding, China 593

Populus canadensis cont.
- pollination, flowers, abscisic acid, measurement 1313
- roots, girdling, wire 1981
- veneers, Spain, quality, variation, growth effects 6365
- wood anatomy, variation, age, site factors 1986
- wood chemistry, esters 1253

***Populus* 'Canberra',** increment, stem form, Australia 7716

Populus canescens, phenology, climatic change, Europe 4618

Populus ciliata
- insect pests
  - *Epipemphigus marginalis,* India, galls 632
  - *Gibberifera simplana* subsp. *glaciata,* India, control 3192
- seed germination, storage, India 9432
- shoot cuttings, India 106
- vegetative propagation, indigenous knowledge, Nepal 6883

***Populus ciliata* × *Populus deltoides*,** clones, species trials, breeding programmes, India 577

***Populus* 'Columbia River'**
- biomass production, photosynthesis, France 4401
- short rotation forestry, height, Western Europe, border effects 8700

***Populus* 'Conti 12',** forest nurseries, weed control, herbicides, Argentina 943

***Populus* 'D-121',** variety trials, India 2557

Populus davidiana
- insect pests
  - *Cryptorhynchus lapathi,* Korea Republic, resistance, heritability 8326
  - *Endoclita excrescens,* Korea Republic, resistance, heritability 8326

Populus deltoides
- agroforestry
  - Argentina 6735, 10108
  - increment, India 4110
  - soil fertility, India 2413
  - South Africa 723
- bark, thickness, fire resistance, USA 1197
- biomass, forest litter, nutrients, India 1942
- biomass production, USA 1835
- clones
  - planting stock, survival, growth, India 155
  - species trials, breeding programmes, India 577
- flowers, development 6420
- foliage
  - air pollution, sulfur dioxide, photosynthesis, nutrient uptake 7183
  - drought resistance, water balance, plant composition 1121
  - plant morphology, apical meristems 2044
- forest influences, soil chemistry, USA 8791
- forest litter, decomposition, sandy loam soils, laboratory tests 5264
- forest plantations
  - weed control, herbicides, USA 173
  - wood chemistry, USA 8919
- fungal diseases
  - forest nurseries, India, control 10024
  - *Melampsora medusae*
    - genetic resistance 5517
    - genetic variation, resistance 4873
- gene expression, bark, proteins, storage 5534
- genetic resistance, fungal diseases, *Melampsora medusae* 5517
- genetic variation
  - chloroplast genetics 7370-7371
  - increment, plant morphology 5551
- insect pests
  - *Chrysocoris purpureus,* forest nurseries, India 7433
  - *Clostera inclusa,* USA, damage 4037
- molecular genetics, gene mapping 7367
- natural regeneration, vegetative propagation, Canada 6507

Populus deltoides cont.
- plant water relations, water stress, biochemistry 1119
- pollination, flowers, abscisic acid, measurement 1313
- riparian forests
  - natural regeneration, USA, site factors 8393
  - water stress, cavitation, Canada 1118
- shoot cuttings
  - India 106
  - roots, development, USA 2031
- spacing
  - agroforestry, Pakistan 6724
  - cycling, biomass production, India 1941
- tissue culture, genetic variation, genetic markers 8232
- variety trials
  - forest nurseries, India 9418
  - India 1654-1655, 2557
  - salt tolerance, pot experimentation 9417
- wetlands, plant succession, USA 2157

Populus deltoides* × *Populus maximowiczii
- fungal diseases, *Melampsora medusae,* genetic resistance 5517
- genetic resistance, fungal diseases, *Melampsora medusae* 5517

Populus deltoides* × *Populus nigra
- fungal diseases, *Melampsora medusae,* genetic resistance 5517
- genetic resistance, fungal diseases, *Melampsora medusae* 5517

***Populus deltoides* × *Populus simonii*,** plant morphology, genetic variation, tree breeding, China 593

***Populus* 'DN-177',** agroforestry, pot experimentation 9277

***Populus* 'DN-74',** coppice, thinning, Canada 148

***Populus* 'DN34',** fungal diseases, *Mycosphaerella populorum,* air pollution, ozone, disease resistance 5644

***Populus* 'Dorskamp',** air pollution, ozone, plant composition, carbohydrates 2879

***Populus* 'Ellert',** species trials, France, growth, disease resistance, phenology 8560

Populus eugenei
- biomass, assimilation, nutrient allocation, carbon 3641
- photosynthesis
  - simulation, sampling 6826
  - statistical analysis, diurnal variation, seasonal variation 8936
- roots, carbon dioxide enrichment, nitrogen cycle 7191

Populus euphratica, clones, species trials, breeding programmes, India 577

Populus euramericana (*see Populus canadensis)*

Populus fremontii
- foliage
  - movement
    - gas exchange 3785
    - plant physiology, USA, temperature 3799
- hybrids, insect pests, USA 6594
- insect pests
  - *Chaitophorus,* interactions, Formicidae 5754
  - *Chrysomela confluens,* damage, ecology 5754
- plant colonization, streams, salinity, USA 6565
- riparian forests, birds, species diversity, USA 8362
- water uptake, USA, riparian forests 1108

***Populus* 'Fritzi Pauley'**
- biomass production, photosynthesis, France 4401
- short rotation forestry, height, Western Europe, border effects 8700

***Populus* 'G-3'**
- shoot cuttings, species trials, India 63
- spacing, roots, distribution, India 2658
- variety trials, India 2557

***Populus* 'G-48'**
- increment, stem form, Australia 7716
- variety trials, India 2557

Populus grandidentata
- carbon dioxide enrichment, cycling, USA 3548
- defence mechanisms, *Lepus americanus,* evolution, USA 4915
- energy relations, Canada, measurement, techniques 6262
- fertilizers, sewage sludge, USA, ecology 3416
- forest ecology, plant succession, plant competition, USA 7312
- increment, height, understorey, USA 3963
- insect pests
  - *Lymantria dispar,* USA, biology 645-646, 5733
  - *Phratora purpurea,* USA 2343
- mammals, *Lepus americanus,* browsing damage, USA 4919
- plant physiology, drought, USA, plant ecological groups 8813
- roots, growth, carbon dioxide enrichment, nitrogen 6433
- site class assessment, stand density, USA 1839

***Populus* 'Hees',** species trials, France, growth, disease resistance, phenology 8560

***Populus* 'Hunnegem',** tissue culture, micropropagation, ontogeny, ploidy 5092

Populus hybrida, aquatic fungi, endophytes, Pakistan 8253

***Populus* 'I-154',** increment, stem form, Australia 7716

***Populus* 'I-214'**
- cell walls, lignification 1233
- growth effects, reaction wood, France, wood defects 4586
- increment, stem form, Australia 7716
- wood anatomy, variation, age, site factors 1986

***Populus* 'I-488',** increment, stem form, Australia 7716

***Populus* 'ILL-005'**
- photosynthesis
  - simulation, sampling 6826
  - statistical analysis, diurnal variation, seasonal variation 8936

Populus interamericana
- agroforestry, soil properties, nitrogen cycle, Sweden 10115
- biomass production, USA 1835
- canopy, water uptake, transpiration, USA 1932
- clones, species trials, breeding programmes, India 577
- enzymes, methyltransferase, molecular genetics 2087
- foliage
  - injuries, molecular genetics 2214
  - ozone, uptake 8495
- fungal diseases, *Melampsora medusae,* USA, mortality 4871
- genetic variation, increment, plant morphology 5551
- molecular genetics 5532
  - enzymes 7377
- plant water relations, water stress, biochemistry 1119
- shoot cuttings, roots, development, USA 2031
- short rotation forestry, irrigated stands, Canada, growth 1752

Populus kitakamiensis
- gene expression, enzymes 7369
- genetic transformation 5537
- molecular genetics 5536

***Populus* 'Koltay',** wood anatomy, variation, age, site factors 1986

***Populus* 'Kopecky',** wood anatomy, variation, age, site factors 1986

Populus koreana, soil toxicity, boron, tolerance 7921

***Populus* 'Koster',** species trials, France, growth, disease resistance, phenology 8560

Populus lasiocarpa, grafting, compatibility 2583

Populus laurifolia, fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463

***Populus* 'Loenen'**
- air pollution
  - foliage, senescence, chemistry, raffinose 334
  - senescence, chemistry, *myo*-inositol 4549

***Populus* 'Marilandica'**
- shoot cuttings
  - air pollution
    - heavy metals
      - damage 7084
      - tolerance, Poland 7085

Populus maximowiczii
- fungal diseases
  - *Melampsora larici-populina,* plant physiology, resistance 1463
  - *Melampsora medusae,* genetic resistance 5517
- genetic resistance, fungal diseases, *Melampsora medusae* 5517
- genetic variation, chloroplast genetics 7370-7371
- stem form, mechanics, seedlings, Japan 1231
- tree breeding, genetics, Japan 1420

Populus maximowiczii* × *Populus laurifolia, fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463

Populus maximowiczii* × *Populus nigra
- fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463
- shoots, coppicing, photosynthesis, plant nutrition, carbohydrates 7195

***Populus maximowiczii* × *Populus* 'Rochester',** air pollution, foliage, senescence, chemistry, raffinose 334

Populus maximowiczii* × *Populus trichocarpa, ozone, biochemistry 453

Populus monilifera (*see Populus deltoides*)

***Populus* 'Muhle Larsen',** ground vegetation, short rotation forestry, Germany 6554

***Populus* 'NE-42'**
- air pollution, sulfur dioxide, foliage, damage, phenolic compounds 1161
- shoot cuttings
  - air pollution
    - heavy metals
      - damage 7084
      - tolerance, Poland 7085

Populus nigra
- air pollution, heavy metals, indicator plants, Greece 7106
- bottomland forests, natural regeneration, seed germination, Netherlands 9963
- fungal diseases
  - *Melampsora larici-populina,* plant physiology, resistance 1463
  - *Melampsora medusae,* genetic resistance 5517
- genetic resistance, fungal diseases, *Melampsora medusae* 5517
- genetic variation, chloroplast genetics 7370-7371
- mycorrhizas, *Tuber magnatum,* Italy 6609
- pollination, flowers, abscisic acid, measurement 1313
- reclamation, landfills, species trials, plant nutrition, UK 4948
- sewage, soil chemistry, USA 896
- synecology, Russia 4780
- tissue culture, buds 4278
- UK 5366

Populus nigra* × *Populus maximowiczii
- irrigation, leachates, plant physiology, Canada 1753
- wood anatomy, lignin, cell walls, lignification 3714

Populus nigra* var. *italica
- foliage, air pollution, lead, urban forestry, Italy 7992
- fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463

Populus nigra* var. *italica cont.
- reclamation
  - landfills
    - species trials
      - plant nutrition, UK 4948
      - UK 4947

Populus nigra* var. *italica* × *Populus cathayana, fungal diseases, *Dothiorella gregaria,* pruning, plant growth regulators, control 9086

Populus nigra* var. *italica* × *Populus laurifolia, fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463

Populus nigra* var. *italica* × *Populus nigra, fungal diseases, *Melampsora larici-populina,* plant physiology, resistance 1463

***Populus* 'Primo',** carbon dioxide enrichment, growth, plant physiology 8755

Populus pruinosa, soil salinity, foliage, Tajikistan, nutrients 1940

***Populus* 'Rap'**
- ground vegetation, short rotation forestry, Germany 6554
- plant competition, Netherlands, growth 6938

***Populus* 'Raspalje'**
- biomass production, photosynthesis, France 4401
- short rotation forestry, height, Western Europe, border effects 8700

***Populus* 'Robusta'**
- air pollution, sulfur dioxide, foliage, damage, phenolic compounds 1161
- biochemistry, enzymes, starch 3787
- biomass production, photosynthesis, France 4401
- branches, chemistry, frost resistance, seasonal variation 2987
- carbon dioxide enrichment, biomass production, photosynthesis, Belgium 8112
- defoliation, wood chemistry, seasonal variation 3780
- girdling
  - bark, proteins 6500
  - wood chemistry, seasonal variation 3780
- photosynthesis, pith 1279
- shoot cuttings, air pollution, heavy metals, tolerance, Poland 7085
- shoots, proteins, messenger RNA, seasonal variation 1251
- short rotation forestry, height, Western Europe, border effects 8700
- wood, biochemistry, starch, metabolism, seasonal variation 2988
- yield forecasting, estimation, statistical analysis 6959

***Populus* 'Rochester',** air pollution, senescence, chemistry, *myo*-inositol 4549

Populus simonii
- amenity trees, frost injury, Estonia 5904
- protoplast culture 6895

***Populus* 'Spijk',** plant competition, Netherlands, growth 6938

Populus tacamahaca (*see Populus balsamifera*)

Populus thevestina (*see Populus nigra*)

Populus tomentiglandulosa, degraded forests, forest decline, urban areas, Korea Republic 9312

Populus tomentosa, species trials, exotics, arboreta, New Zealand 2545

Populus tremula
- afforestation, soil conservation, soil water retention, China 5841
- arboricides, Russia 2643
- bark
  - anatomy 4624
  - crystals, diagnostic value 6410
- basal area, Russia 1818
- boreal forests, natural regeneration, Russia, simulation, management 9965
- choice of species, silviculture, utilization, UK, reviews 9546
- dead trees
  - Finland, insects, endangered species 4027

***Populus tremula** cont.*
  dead trees *cont.*
    Russia, insects, endangered species 4027
  epiphytes, bark, chemistry, soil chemistry, Sweden 8168
  forest ecology, plant succession, plant competition, USA 7312
  fungal diseases
    Melampsora populnea, Italy 609
    Phellinus tremulae, Sweden, population genetics 8289
  geographical distribution, autecology, genetic variation, UK 7142
  hybrids, species trials, genetic variation, Sweden 9416
  mammals, *Castor fiber,* Germany 6674
  mined land, Germany, clay soils 1538
  natural regeneration
    clear felling, Sweden 3439
    control, arboricides, Russia 8635
  photosynthesis
    chlorophyll 3788
    lichens, Norway, adverse effects 8932
  plant nutrition, pioneer species, Germany 2850
  reclamation, mine spoil, UK, soil amendments 6708
  rodents, damage, provenance trials, Sweden 4055
  roots, chemistry, seasonal variation, Sweden 9826
  seed germination, seedling growth, allelopathy, plant extracts, *Pteridium aquilinum* 5464
  wildlife, *Alces alces,* browse, forests, Poland 7534
Populus tremula* × *Populus alba, gene expression, genetic engineering 7375
Populus tremula* × *Populus alba, genetic transformation, foliage, enzymes 5543
Populus tremula* × *Populus alba, tissue culture, protoplasts, culture media 92
Populus tremula* × *Populus tremuloides, plant growth regulators, IAA, metabolism 7184
Populus tremula* × *Populus tremuloides
  tissue culture
    explants, storage 1704
    roots, development, biochemistry, polyamines 3774
    shoots, rooting, plant growth regulators 9455
Populus tremuloides
  air pollution
    ozone
      nutrient deficiencies, nitrogen, photosynthesis 3023
      water stress, photosynthesis 3023
  birds, species diversity, Canada 3217
  bison, geographical distribution, grazing, Canada 7268
  boreal forests
    forest health, monitoring, Canada 9866
    stand characteristics, biomass production, Canada, simulation 9596
  decay, Canada, measurement, statistical analysis 4392
  defence mechanisms, *Lepus americanus,* evolution, USA 4915
  foliage
    movement
      gas exchange 3785
      plant physiology, USA, temperature 3799
    optical properties, remote sensing 1256
  forest economics
    nature conservation, simulation, USA 1870
    silvicultural systems, simulation, USA 1870
  forest litter, decomposition, microorganisms, Canada 5263
  fungal diseases
    Hypoxylon mammatum, USA, disease vectors 10011
    Phellinus tremulae
      Canada 8345
      galls, Canada 5623
***Populus tremuloides** cont.*
  fungal diseases *cont.*
    Phoma etheridgei, Canada, antagonism, *Phellinus tremulae* 8300
  gas exchange, isoprenoids, seasonal variation, temperature, USA 4681
  genetic engineering, enzymes 2221
  genetic transformation, tissue culture 5560
  genetic variation, molecular genetics, Canada 595
  gibberellins 3795
  growth models, height, stand characteristics, Canada 1838
  height, growth models, site class assessment, Canada 4417
  hybrids, species trials, genetic variation, Sweden 9416
  increment, topography, soil properties, USA 5235
  insect pests
    Aceria parapopuli, galls, Canada 8345
    Lymantria dispar
      USA
        biology 645-646, 5733
        resistance 2318
    Malacosoma disstria, USA, population dynamics 5701
    Papilio canadensis, USA 5712
    Saperda inornata, USA, disease vectors 10011
  logging, Canada, stand development 9588
  major elements, herbicides, Canada 7975
  mammals, *Lepus americanus,* browsing damage, USA 4919
  mixtures, increment, Canada 4361
  molecular genetics, enzymes 5544
  mycorrhizas
    Cortinarius hedyaromaticus, USA 601
    Laccaria bicolor, population genetics, USA 9997
  natural regeneration, forest litter, site preparation, Canada 3434
  nutrient allocation, ozone, simulation 1977
  ozone, nutrient allocation, stress factors, interactions 1975
  plant colonization, *Juniperus occidentalis,* USA 6564
  plant nutrition, iron, waterlogging, USA 3638
  population dynamics, increment, USA, equations 9962
  seedling growth, plant nutrition, nitrogen, air pollution, ozone 9743
  site class assessment
    Canada, equations, models 7820
    stand density, USA 1839
  snow damage, USA 4483
  soil fauna, Oligochaeta, Canada, growth 4502
  stomatal resistance, gas exchange, simulation, Canada 801
  subalpine forests
    dendrochronology, USA 3291
    USA
      disturbed land
        human activity 9940
        recovery 9940
  tumours, anatomy, Canada 8116
  vegetation management, controlled burning, edible species, Canada 374
  woody weeds, control, Canada, herbicides 1770
Populus trichocarpa
  biomass production, USA 1835
  fungal diseases
    Melampsora, tree breeding, resistance 3999
    Septoria, tree breeding, resistance 3999
    Septoria populicola
      Canada 8308
      USA 8308
  genetic variation, increment, plant morphology 5551
  molecular genetics, gene mapping 7367
  photoperiodism, phenology 6489
  plant nutrition, antagonism 1290
***Populus trichocarpa** cont.*
  plant water relations, water stress, biochemistry 1119
  seedling growth, survival, genetic variation, USA, stress factors 3996
  shoot cuttings, roots, development, USA 2031
  tree breeding, selection criteria, morphology, fungal diseases, resistance 3999
  volume determination, Canada, stumps, residues 2684
Populus trichocarpa* × *Populus deltoides, chloroplast genetics, identification 5535
Populus trichocarpa* × *Populus maximowiczii, fungal diseases, *Melampsora medusae,* USA, mortality 4871
Populus wilsonii, grafting, compatibility 2583
Populus xiaozhuanica, fungal diseases, *Dothiorella gregaria,* pruning, plant growth regulators, control 9086
Poraqueiba guianensis, wood chemistry, sesquiterpenoids 9838
Poraqueiba paraensis, wood chemistry, sesquiterpenoids 9838
Poria weirii *(see Phellinus weirii)*
Porthetria dispar *(see Lymantria dispar)*
Portugal
  broadleaves, coppice, forest resources 8612
  carbon dioxide enrichment, forest fires, forecasting 3540
  Cupressus sempervirens, variety trials, site factors, plant morphology 6020
  dunes, synecology 7288
  Eucalyptus
    forest influences, atmosphere, air pollution, measurement 8499
    hybrids, cold resistance, acclimatization, plant physiology 1890
  Eucalyptus globulus
    coppice, clear felling, hydrology 3687
    cycling, forest litter 7913
    essential oils 3746
    genetic variation, water stress, plant physiology 1930
    plant competition, water availability, nutrients 4752
    roots
      development, fertilizers, irrigation 8048
      irrigation, fertilizers, soil properties 8767
  fire weather, precipitation 1192
  forest litter, decomposition, forest influences, soil chemistry 8026
  forest nurseries, insect pests, fungal diseases 4160
  forest trees
    controlled burning, forest litter, cellulose, decomposition 7140
    forest fires, forest litter, cellulose, decomposition 7140
  forestry development, history 1626
  fungal diseases
    Ophiostoma novo-ulmi, Ulmus procera 9103
    Populus, control 7411
    Seiridium cardinale, Cupressus sempervirens, resistance 6020
  global warming, air pollution, forecasting 3540
  insect pests, *Platypus cylindrus, Quercus suber* 7464
  land use, multiple use, conferences 6804
  medicinal plants 7809
  Pinus pinaster
    genetic variation, height 7352
    site class assessment, yield tables 1844
  Pinus pinea, edible species, seeds, production, stand characteristics 1797
  Quercus, foliage, trichomes 6403
  Quercus coccifera
    forest fires, simulation 7133
    vegetation types, synecology 7289
  Quercus pyrenaica, bioclimate 1876
  Quercus suber
    forest management, multiple use, forest economics 9257

- **Portugal** *cont.*
  - *Quercus suber cont.*
    - phenology 5367
  - sclerophyllous scrub, plant water relations, leaf water potential, seasonal variation 4514
  - shrubs, forest fires, simulation 7132
- ***Poulsenia armata***
  - endophytes, *Albosynnema elegans,* branches, Costa Rica 9067
  - foliage, anatomy, light intensity, photosynthesis 3731
  - rain forests, Mexico, wood anatomy 1211
- ***Pouteria campechiana,*** liberation felling, Mexico, girdling, poisoning 2648
- ***Pouteria lucuma,*** choice of species, forestry development, South America, handbooks 2551
- ***Pouteria obovata,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- ***Pouteria sericea,*** foliage, chemistry, Australia 7081
- ***Pouteria unilocularis,*** liberation felling, Mexico, girdling, poisoning 2648
- **Power lines,** weed control, broadleaves, USA 4344
- ***Praomys natalensis***
  - rodents
    - *Pinus patula,* South Africa, forest plantations, control 1516
    - seed predation, *Acacia,* savannas, South Africa 4068
- ***Pratylenchus brachyurus,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Pratylenchus zeae,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Prays fraxinella***
  - insect pests
    - *Fraxinus excelsior*
      - UK 5707
        - feeding behaviour, dieback 8334
- **Precipitation**
  - *Acacia farnesiana,* canopy, Mexico, simulation 2398
  - *Aspidosperma quebracho-blanco,* vegetation types, Argentina 3914
  - availability, *Eucalyptus grandis,* growth models, water use efficiency, South Africa 9355
  - broadleaves
    - foliage, leaching 7089
    - plant water relations, USA 6303
  - canopy, broadleaved evergreen forests, China 2400
  - chemistry, forest influences, throughfall, India 9761
  - conifers
    - air pollution, deposition, throughfall, Western Europe 2866
    - USA 4083
  - deposition, broadleaves, cloud forests, Puerto Rico 2789
  - *Diospyros texana,* canopy, Mexico, simulation 2398
  - *Fagus sylvatica,* air pollution, hydrology, UK 3670
  - fire weather, Portugal 1192
  - forest influences
    - atmosphere
      - India, simulation 9759
      - Tropics, simulation 9759
    - hydrology, runoff, Japan, statistics 7550
  - forest plantations, soil water, South Africa, simulation 9354
  - forest trees, foliage, nutrients, Puerto Rico 1938
  - forests, canopy, simulation 7679
  - Germany, statistical analysis 792
  - *Juniperus ashei,* gas exchange, seasonal variation, USA 1263
  - multipurpose trees, agroforestry, pruning trash, decomposition, Nigeria 8434
  - *Picea abies*
    - canopy, Belgium, leaching 4082
    - increment, Germany 7818
- **Precipitation** *cont.*
  - *Picea abies cont.*
    - throughfall, air pollution, Switzerland, trace elements 4552
  - *Pinus pinaster*
    - canopy, simulation, France 701
    - forest plantations, canopy, simulation, France 7679
  - *Prosopis laevigata,* canopy, Mexico, simulation 2398
  - *Psychotria horizontalis*
    - genotype environment interaction
      - plant morphology, Panama 1880
      - plant physiology, Panama 1880
  - *Quercus,* forest decline, symptoms, Poland 1298
  - *Quercus virginiana,* gas exchange, seasonal variation, USA 1263
  - rain forests
    - canopy
      - erosion
        - Sabah 8012
        - simulation 8012
      - French Guiana 9765
      - wind, Australia, simulation 7123
  - *Rhododendron arboreum,* canopy, cycling, India 10085
  - stemflow, throughfall, *Pinus pinaster,* canopy, France 700
  - vegetation
    - atmosphere
      - India, simulation 9759
      - Tropics, simulation 9759
- ***Premna wightiana,*** flora, geographical distribution, Sri Lanka 6522
- ***Prestoea montana***
  - bottomland forests, wind damage, Puerto Rico 1066
  - rain forests, wind damage, Puerto Rico 3561
  - wind damage, Puerto Rico 1073
- **Prices**
  - *Abies fraseri,* Christmas trees, grading, USA 9557
  - private forestry, forest economics, USA, analysis, methodology 1054
  - stumpage value, USA 1055
- **Primates**
  - ecology, virgin forests, shifting cultivation, Sierra Leone 3215
  - feeding behaviour, phenology, Brazil 3220
  - forest fragmentation, conservation, Brazil 9295
  - India, feeding behaviour 6687
  - monkeys, feeding behaviour, Caesalpinioideae, rain forests, Zaire 9218
  - rain forests
    - forest management, nature reserves, Uganda 4057
    - plant succession, Sierra Leone 1527
  - tropical forests, Peninsular Malaysia, logging effects 9203
- ***Prioria copaifera,*** forest litter, decomposition, drought, Panama 1916
- ***Pristiphora abietina***
  - insect pests
    - *Picea,* air pollution, Austria 7487
    - *Picea abies*
      - Austria
        - integrated control 9176
        - predators 9176
      - Germany 10057
- ***Pristiphora erichsonii***
  - insect pests
    - *Larix laricina*
      - dendrochronology
        - Canada 5764
          - introduced species 1486
- **Private forestry**
  - accident prevention, Sweden 8550
  - amenity value of forests, landscape, Finland, methodology 10136
  - Europe, reviews 6249, 8749-8750
  - extension, USA 2537
  - forest economics
    - Austria 263
    - conferences 773
    - employment, Canada, subsidies 9644
    - Finland 5215
- **Private forestry** *cont.*
  - forest economics *cont.*
    - forest management, Netherlands, methodology 265
    - Netherlands, profitability 1051
    - prices, USA, analysis, methodology 1054
    - surveys, UK 4462
    - Sweden 5215
    - USA, income tax 3530
  - forest management
    - attitudes, USA 7703
    - carbon cycle, simulation, USA 3630
    - education, USA, surveys 53
    - forest economics, USA 210
    - research, USA 1642
    - sustainability, economics, Costa Rica 5219
    - USA
      - incentives 4245
      - timber supply 5040
  - fuel plantations, Nepal 6011
  - history, Germany 4235
  - legislation, USA 2530, 6854-6856
  - logging, USA, socioeconomics 5987
  - taxes
    - Canada 1639
    - USA 2531
  - timber trade, marketing, USA, simulation 2777
  - training, safety, Germany 6003
  - USA, forest management 3502
  - wildlife, conservation, France 9202
- **Private organizations**
  - forest management, sustainability 1013
  - mangrove forests, projects, Tropics 1358
  - wetlands, projects, Tropics 1358
- ***Prociphilus himalayensis,*** insect pests, *Pinus wallichiana,* India, biology 2313
- ***Prociphilus xylostei,*** insect pests, *Picea abies,* UK, roots, air pollution 4573
- ***Proctolaelaps kirmsei***
  - mites
    - *Hamelia patens*
      - nectar, consumption, Costa Rica 10051
      - pollen, consumption, Costa Rica 10052
- **Profits,** forest economics, planting, analysis 3529, 7016
- **Progeny trials** (*see* Tree breeding, progeny testing)
- **Project appraisal,** forest management, participation, community forestry, India 6198
- **Projects**
  - mangrove forests, private organizations, Tropics 1358
  - watersheds, management, education, Cuba 4078
  - wetlands, private organizations, Tropics 1358
- **Propaganda** (*see* Public relations)
- ***Prosopis***
  - defoliation, seasonal variation, soil salinity, wind damage, Cape Verde 1883
  - exudates, yeasts, Argentina 9065
  - fungal diseases
    - *Lasiodiplodia,* USA 10003
    - *Pestalotiopsis,* USA 10003
  - species trials, Cape Verde 1667
  - woody weeds, biological control, USA, laboratory tests 167
- ***Prosopis alba***
  - progeny testing, species trials, biomass production, USA 3137
  - seed germination, seed treatment 72, 85
  - seeds, microbial flora, seed germination, Argentina 860
  - species trials, fuelwood, India 1661
  - vesicular arbuscular mycorrhizas, *Glomus intraradices,* USA 4843
  - water use
    - transpiration, USA 8804
    - USA 7059
- ***Prosopis caldenia,*** phenology, climate, Argentina 1210
- ***Prosopis chilensis***
  - container grown plants, afforestation, Argentina, techniques 4951

Prosopis chilensis *cont.*
- direct sowing, afforestation, Argentina, techniques 4951
- flowers, reproductive behaviour, morphology 2051
- fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
- heat resistance, biochemistry 3798
- in vitro culture, development projects, Djibouti 9444
- seedlings, water stress, roots, growth 314
- species trials, fuelwood, India 1661

Prosopis cineraria
- agroforestry, India 10107
- branching, habit, India 2037
- forest plantations, roots, distribution, India 2952
- fuelwood, India, calorific value 3361
- growth
  - allelopathy
    - *Acacia tortilis,* interplanting, India 2161
    - *Azadirachta indica,* interplanting, India 2161
- insect pests, India 626
- pollination, insects, India 5675
- progeny testing, early selection, plant morphology, India 2209
- provenance, foliage, chemistry, India 9050
- seed germination, planting, soil properties, India 4336
- seedling growth, allelopathy, multipurpose trees, foliage, extracts 2161
- seedlings, root nodules, *Rhizobium,* arid soils, India 2234
- shelterbelts, species trials, soil properties, India 3689
- tissue culture, explants, micropropagation 2593
- vegetation, reclamation, sodic soils, India 712

Prosopis flexuosa
- container grown plants, afforestation, Argentina, techniques 4951
- direct sowing, afforestation, Argentina, techniques 4951
- flowers, reproductive behaviour, morphology 2051
- phenology, climate, Argentina 1210
- scrub, Argentina, research, ecology, management 1383
- seed germination, seed treatment 72
- silvicultural systems, wood properties, Argentina 7119

Prosopis glandulosa
- increment, plant competition, grasses, USA 9013
- plant water relations, plant nutrition, nitrogen, carbon dioxide, concentration 5227
- progeny testing, species trials, biomass production, USA 3137
- seed germination, seed treatment 85
- street trees, air pollution, dust, damage, Pakistan 4550
- transpiration, methodology 2491

Prosopis juliflora
- afforestation, sandy soils, Saudi Arabia 1536
- air pollution, heavy metals, indicator plants, USA 1162
- allelopathy, plant extracts 9955
- browse, indigenous knowledge, Kenya 6669
- coppice, management, irrigated stands, Kenya 6094
- foliage
  - air pollution, smelters, USA 8842
  - extracts, *Prosopis cineraria,* seedling growth, allelopathy 2161
- forest nurseries, irrigation, waste water, Niger 9473
- forest plantations, sand dune stabilization, Senegal 4939
- fuel plantations
  - irrigated stands
    - biomass production, water use efficiency, Kenya 6021
    - economics, Kenya 6242

Prosopis juliflora *cont.*
- fuel plantations *cont.*
  - irrigated stands *cont.*
    - stand density, increment, Kenya 6131
  - spread, utilization, charcoal, Kenya 6010
- irrigated stands
  - biomass, equations, Kenya 5960
  - biomass production, pods, Kenya 6145
  - soil chemistry, nutrients, Kenya 6371
- multipurpose trees, indigenous knowledge, Kenya 6384
- pollen, allergens, glycoproteins 1243
- reclamation
  - mined land, India, economics 3248
  - saline soils, agroforestry, India 8389
  - waste land, soil water, infiltration, India 8397
- root nodules, nitrogen fixation, seedlings, measurement, isotope dilution 10002
- seed germination, salt tolerance, plant growth regulators 6035
- seedling growth
  - symbiosis
    - *Bradyrhizobium japonicum,* nitrogen fixation 3151
    - *Rhizobium,* nitrogen fixation 3151
- seedlings, root nodules, *Rhizobium,* arid soils, India 2234
- shelterbelts, irrigation, saline water 1534
- shoot cuttings 1693
  - Cape Verde 1694
  - Haiti
    - fogging
      - equipment 2596
      - growing media 2596
  - rooting, respiration, measurement 880
- species trials
  - reclamation, sodic soils, India 712
  - shelterbelts, irrigation, saline water, Saudi Arabia 2559
- variety trials, increment, plant morphology, India 1662
- water harvesting, savanna woodlands, rehabilitation, Kenya 6120

Prosopis laevigata, precipitation, canopy, Mexico, simulation 2398

Prosopis nigra
- pollination
  - Apidae, Argentina, landscape ecology 1470
  - Argentina, forest ecology, fragmentation 4954
- silvicultural systems, wood properties, Argentina 7119

Prosopis pallida, fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021

Prosopis pugionata, flowers, reproductive behaviour, morphology 2051

Prosopis torquata, flowers, reproductive behaviour, morphology 2051

Prosopis velutina
- groundwater, USA, water stress 309
- riparian forests, hydrology, simulation, USA 1531
- seed germination, seed treatment 85

Prostephanus truncatus, insect pests, broadleaves, Mexico 7476

Protea obtusifolia, reproductive behaviour, fynbos, South Africa 1305

Protea susannae, reproductive behaviour, fynbos, South Africa 1305

Proteaceae, rain forests, foliage, morphology, Australia 4651

Protection forests
- conifers, silviculture, France, mountain forests 5840
- deer, browsing damage, forest economics, Germany 7533
- erosion control, Russia, forest steppe 4943-4944
- forest trees
  - artificial regeneration, Germany 7552
  - choice of species, avalanches, Germany 6869
- geographical information systems, France, avalanches, landslides 3227

Protection forests *cont.*
- hydrology, economics, Italy 703, 6699
- landslides, Korea Republic 9240
- natural disasters
  - France, surveys 10089
  - risk, Switzerland 10088
- *Picea abies*
  - forest decline, fertilizers, Switzerland 7753
  - stand structure, France, natural disasters 10090
- radionuclides, control, silviculture 3229
- rehabilitation, Indonesia 1529-1530
- riparian forests
  - streams, USA 4076
  - USA, design 4930
- runoff, water quality, Russia 4603
- silviculture, Arid Regions, Russia 9234
- soil conservation, books 5926
- stand development, remote sensing, Austria 245

Protection of forests
- Argentina 1552
- canes and rattans, *Calamus edulis,* forest management, Indonesia 7803
- community forestry, forest management, sustainability, forest products, Nepal 6742
- forest administration, Poland 3343
- forest management
  - Europe 2518
  - forest economics, models, North America 6248
  - sustainability, Europe, conferences 2484

Protective clothing, noise, safety, Canada 1648

Protium copal, liberation felling, Mexico, girdling, poisoning 2648

Protium tenuifolium, wood chemistry, Brazil, lignans 9819

Protofagacea allonensis, palaeobotany, USA 5377

Protorhus namaquensis, taxonomy, seed anatomy, South Africa 3848

Provenance
- *Abies alba,* air pollution, foliage, Italy 6330
- *Acacia mangium,* seedling growth, nitrogen fixation, plant nutrition, phosphorus 6313
- *Acacia nilotica,* foliage, chemistry, genetic variation, India 3141
- *Acacia senegal,* genetic variation, isoenzymes, Senegal 9981
- *Alnus glutinosa,* Germany 9422
- *Atriplex halimus,* fodder, biomass production, Mediterranean Region 1676
- *Cedrus atlantica,* grafting, Italy 9449
- *Chamaecyparis nootkatensis,* frost resistance, altitude, Canada 1083
- collection, *Calliandra calothyrsus,* tree breeding 2210
- *Cryptomeria japonica,* tree breeding, Japan, classification 7344
- *Dendropanax morbifera,* genetic variation, Korea Republic, foliage, morphology 8238
- *Eucalyptus,* foliage, chemistry, chemotaxonomy, Australia 2986
- *Fagus sylvatica,* air pollution, foliage, Italy, damage 5340
- fungal diseases
  - *Ganoderma sculptrutum, Eucalyptus grandis,* Zimbabwe, susceptibility 9098
  - *Melampsora populnea, Pinus pinaster,* phenology, host parasite relationships 4256
- *Gliricidia sepium,* nitrogen fixation, nodulation, Sri Lanka 3994
- identification, *Eucalyptus globulus,* increment, traits, Australia 7724
- insect pests, *Eucalyptus,* Australia, resistance 4031
- *Juglans sinensis,* foliage, fruits, Korea Republic, morphology 9783
- *Larix,* bark, monoterpenes, variation, Poland 1428

- **Provenance** *cont.*
  - *Leucaena*
    - gums
      - exudates
        - chemistry
          - Guatemala 2979
          - India 2979
          - USA 2979
  - *Medicago arborea,* fodder, biomass production, Mediterranean Region 1676
  - *Persea thunbergii,* foliage, seeds, Korea Republic, variation 9978
  - *Picea abies*
    - frost resistance
      - foliage
        - air pollution
          - reviews 9679
          - UK 9679
      - lignification 7034
  - *Picea mariana*
    - plant physiology, Canada 8931
    - plant water relations, seasonal variation, Canada 1110
  - *Picea sitchensis,* wood anatomy, growth, quality 8558
  - *Pinus,* breeding programmes, Colombia 7348
  - *Pinus contorta,* bark, thickness, variation, Sweden 990
  - *Pinus patula,* wood properties, South Africa 4633
  - *Pinus pinaster*
    - salt tolerance, France 4261
    - water stress, seed germination 9720
  - *Pinus sylvestris*
    - bark, monoterpenes, variation, Poland 1427
    - seeds, imbibition, seed morphology, Finland 6400
  - *Prosopis cineraria,* foliage, chemistry, India 9050
  - *Pseudotsuga menziesii*
    - forest plantations
      - genetic variation
        - isoenzymes
          - France 5488
          - Germany 5488
          - USA 5488
    - height, growth, analysis 4203
  - *Tectona grandis,* seed germination, storage, India 6036
- **Provenance trials**
  - *Abies*
    - Christmas trees, Denmark 6945
    - silvicultural characters, France 833
  - *Abies fraseri,* Christmas trees, USA 4260
  - *Abies procera,* increment, climate, Canada 2549
  - *Acacia,* species trials, seed germination, India 8564
  - *Acacia auriculiformis*
    - data processing, statistical analysis, South East Asia 29
    - forest nurseries, India 1669
    - India 1672
    - Peninsular Malaysia 9420
    - South East Asia, plant morphology, growth 5050
  - *Acacia mangium*
    - Indonesia 6026
    - Philippines, disease resistance, pest resistance, survival 6016
  - *Acacia mearnsii,* increment, China 9058
  - *Acacia nilotica,* genetic variation, India 9414
  - adaptation, *Pinus contorta,* geographical distribution, Canada 2548
  - *Alnus,* USA, frost resistance, pest resistance 4255
  - *Alnus glutinosa,* Korea Republic, growth, survival 7721
  - *Alnus rubra,* increment, France 836
  - *Betula,* air pollution, tolerance, Poland 1150
  - broadleaves, China 5941
  - *Chamaecyparis,* Canada 64
  - conifers
    - buds, phenology, climatic change, Finland 2009
- **Provenance trials** *cont.*
  - conifers *cont.*
    - climatic change, adaptation, temperature, simulation 1660
  - *Cornus florida,* ornamental woody plants, USA 5910
  - *Cupressus benthamii,* Tanzania 5058
  - *Cupressus lusitanica,* Tanzania 5058
  - *Dalbergia sissoo,* India 1651
  - *Eucalyptus*
    - species trials, Argentina 835
    - Sri Lanka 5055
  - *Eucalyptus brassiana,* India 1663
  - *Eucalyptus camaldulensis*
    - forest influences, soil chemistry, India 66
    - India 3370
    - progeny testing, Chile 6028
  - *Eucalyptus delegatensis*
    - increment, diameter, stem form, New Zealand 4258
    - wood properties, New Zealand 4592
  - *Eucalyptus globulus*
    - Australia, fungal diseases 4869
    - insect pests, Australia 2554
    - progeny testing, genetic variation, Chile 8237
  - *Eucalyptus microtheca,* irrigated stands, plant physiology, plant water relations, Kenya 6022
  - *Eucalyptus tereticornis*
    - India 8563
    - irrigated stands, Kenya 6023
  - forest trees
    - drought resistance, soil fertility, Israel 6013
    - genotype environment interaction, climatic change, simulation 1659
  - *Fraxinus excelsior,* Romania 8561
  - *Gliricidia sepium*
    - agroforestry, Indonesia, fodder 8567
    - Bhutan 1671
    - genetic variation, Malawi 2555
  - *Juglans,* site requirements, UK 2543
  - *Juglans nigra*
    - genetics, USA 5059
    - USA 834
  - *Juniperus,* shelterbelts, USA 8562
  - *Larix,* species trials, Poland 827
  - *Larix laricina,* site factors, waterlogging, France 4257
  - *Larix olgensis,* wood properties, China 4583
  - *Libocedrus decurrens,* USA 4263
  - mortality, *Pinus sylvestris,* Sweden 3368
  - nitrogen fixing trees, Nigeria 1665
  - *Paulownia,* USA 3366
  - *Picea abies*
    - diameter, increment, drought, Poland 830
    - frost injury, Sweden 7872
    - global warming, increment, Finland 2791
    - hybrids, genetic variation, increment, Sweden 824
    - increment, frost injury, Norway 9413
    - Korea Republic 6871
    - plant competition, Sweden 2178
    - plant nutrition, genetic variation, Poland 1131
    - Poland, age, site factors 829
    - progeny testing, artificial selection, Poland 2179
    - Russia 1658
    - statistical analysis, Germany 8559
  - *Picea glauca,* frost resistance, Canada 1084
  - *Picea mariana,* seedling growth, phenology 3374
  - *Pinus,* species trials, Venezuela 6024
  - *Pinus caribaea,* wood properties, Australia 6866
  - *Pinus contorta* 4170
    - site class assessment
      - Canada 3367
      - Sweden 3367
    - spacing, Canada 9419
    - Sweden 3373
  - *Pinus maximinoi,* pulpwood production, South Africa 60
- **Provenance trials** *cont.*
  - *Pinus patula,* stems, stem form, breakage, South Africa 61
  - *Pinus pinaster*
    - Australia 7717
    - France 1675
      - growth, morphology, pest resistance 9970
    - hybrids, heterosis, France, combining ability 9971
    - salt tolerance, plant nutrition 9712
  - *Pinus ponderosa,* USA 2550
  - *Pinus radiata*
    - genetic variation, New Zealand 4817
    - increment, stem form, Chile 6027
  - *Pinus sylvestris*
    - air pollution, increment, Poland 6030
    - experimental design, plant competition, increment, Sweden 9415
    - Finland
      - insect pests
        - resistance
          - *Gilpinia pallida* 10049
          - *Neodiprion sertifer* 10049
    - Germany 7719, 9424
    - global warming, increment, Finland 2791
    - IUFRO, Europe 831
    - Netherlands 826
    - Poland 837, 3365
      - age, site factors 828
    - Spain 7719
  - *Pinus taeda,* South Africa 2553
  - *Podocarpus totara,* seedling growth, stem form, New Zealand 69
  - *Quercus petraea,* phenology, frost resistance, UK 9412
  - *Quercus rubra,* Korea Republic, growth, survival 7720
  - rodents, damage, broadleaves, Sweden 4055
  - *Sequoiadendron giganteum,* Germany 1674
  - South East Asia, *Acacia auriculiformis* 6867
  - *Tectona grandis*
    - India 6019
    - Sri Lanka 5056
- ***Prumnopitys andina,*** deforestation, nature conservation, Chile 3253
- ***Prumnopitys ferruginea***
  - bottomland forests, floods, canopy gaps, New Zealand 3964
  - treelines, global warming, New Zealand 526
- **Pruning**
  - *Abies fraseri,* Christmas trees, USA 9556
  - *Alnus glutinosa,* nitrogen fixing trees, plant physiology, plant composition, growth 8096
  - broadleaves, street trees, USA, wood residues 4983
  - *Cassia,* plant nutrition, Nigeria 5153
  - conifers
    - branches, seed orchards, reviews 9528
    - crown, seed orchards, reviews 9528
    - Korea Republic, equipment, work study 8657
    - work study, economics 6139
  - *Corylus avellana,* foliage, polyamines 6436
  - *Erythrina poeppigiana*
    - nutrition physiology, nitrogen fixation, Costa Rica 9733
    - root nodules, Costa Rica, effects 9991
  - forest trees
    - books 4152
    - thinning, Germany 9525
  - *Fraxinus pennsylvanica*
    - foliage
      - development, Canada 2956
      - growth 4619
    - shoots, growth 4619
  - fungal diseases
    - *Dothiorella gregaria, Populus,* plant growth regulators, control 9086
    - *Seiridium, Cupressus lusitanica,* New Zealand 5638
  - *Gliricidia sepium,* plant nutrition, Nigeria 5153

Pruning *cont.*
- insect pests
  - *Dioryctria sylvestrella, Pinus pinaster,* France, population dynamics 2337
  - *Tomicus piniperda, Pinus sylvestris,* Sweden, resistance 3183
- *Larix decidua,* knots, wood properties, diameter, Poland 1983
- mixed forests, selection forests, France 5152
- multipurpose trees, agroforestry, root systems, plant competition, Indonesia 10102
- ornamental woody plants
  - books 10154
  - grafting, books, techniques 5917
  - plant morphology, techniques 7610
- *Pinus sylvestris*
  - increment, diameter, Finland, simulation 3455
  - knots, wood properties, diameter, Poland 1983
- *Platanus acerifolia,* France, carbohydrates, distribution, seasonal variation 5393
- *Pseudotsuga menziesii*
  - wood properties, Germany 8859
  - work study, Canada, economics 4358
- *Quercus,* profitability, USA 6363
- *Quercus acutissima,* stems, transplanting, growth 3773
- selection methods, *Pinus sylvestris,* work study, Poland 6130
- street trees, plant morphology, techniques 7610
- urban forestry, USA, surveys, plant residues 7605

Pruning trash
- chemistry
  - decomposition
    - nitrogen fixing trees
      - agroforestry
        - Indonesia 1939
        - laboratory tests 1939
- decomposition
  - *Acioa barteri,* soil fauna, Nigeria 5262
  - *Gliricidia sepium,* soil fauna, Nigeria 5262
  - *Leucaena leucocephala,* soil fauna, Nigeria 5262
  - multipurpose trees, agroforestry, precipitation, Nigeria 8434

Prunus
- afforestation, agricultural land, forest economics, Italy 158
- agroforestry, afforestation, fields, France, research 7580
- frost resistance 1894
- taxonomy, geographical distribution 1351

Prunus avium
- agroforestry
  - Corsica 5883
  - France 5882
- air pollution, plant water relations 7090
- anther culture, genetics, isoenzymes 5090
- carbon dioxide enrichment, plant physiology, chloroplasts, biochemistry, growth 1879
- forest decline, France 3817
- forest nurseries, herbicides, UK, tolerance 2644
- forest plantations, pastures, establishment, trials, France 5880
- genetic variation, frost resistance, buds 282
- herbicides, UK, tolerance 2645
- in vitro culture 8585
  - cold storage 8580
- mixed forests, silviculture, Germany 919
- mycorrhizas
  - *Gigaspora rosea,* micropropagation 5593
  - *Glomus,* micropropagation 5593
- nitrogen fertilizers, irrigation, forest nurseries, UK 4311
- plant morphology, habit, taxonomy, Poland 1322
- plant water relations, stomatal resistance, abscisic acid, Germany 2083

Prunus avium *cont.*
- seedlings, sap flow, measurement 3618
- selection criteria, seed orchards, France 5521
- silviculture, increment, Germany 6137
- species trials, forest plantations, grazing, France 5884
- tree guards, photosynthesis, water use efficiency 4689
- wildlife, *Alces alces,* browse, forests, Poland 7534

***Prunus avium* × *Prunus pseudocerasus*,** nitrogen fertilizers, irrigation, forest nurseries, UK 4311

***Prunus cerasus*,** genetic transformation 7379

***Prunus mahaleb*,** seed dispersal, birds, Spain, ecology, species diversity 9204

***Prunus padus*,** forest litter, streams, UK, fauna 5252

Prunus pensylvanica
- genetic transformation 7379
- insect pests, *Choristoneura fumiferana,* natural regeneration, USA 1487
- plant succession, plant colonization, wind damage, USA 277
- seedling growth, plant competition, browsing damage, USA 3878
- stand density, stand development, botanical composition, USA 1781

***Prunus persica*,** dwarfism, seedlings, morphogenesis 6397

Prunus serotina
- air pollution, forest litter, decomposition, USA 6344
- bark, thickness, fire resistance, USA 1197
- browsing damage, seedling growth, light, USA 1520
- control
  - woody weeds
    - herbicides
      - Germany 9513
      - USA 1767
- fertilizers, lime, Germany 8591
- foliage, crown, light intensity, plant morphology, development 2014
- forest litter, decomposition, streams, USA 7898
- frost resistance, climate, simulation, USA 800
- insect pests, *Caloptilia serotinella,* behaviour 7449
- light, soil water, increment, USA 5181
- ozone, uptake, damage, USA 7985
- plant physiology, drought, USA, plant ecological groups 8813
- plant succession, old fields, USA 4794
- roots, growth, containers 4978
- seedling growth, air pollution, ozone, USA 9744
- stem form, USA 8692
- tissue culture, micropropagation, paclobutrazol 3392
- water stress, genotype environment interaction, adaptation, USA 2206
- weed control, herbicides, USA 942

Prunus spinosa
- plant morphology, habit, taxonomy, Poland 1322
- viral diseases, Germany 8318

***Prunus turneriana*,** rain forests, seeds, survival, predation, Australia 4050

***Prunus virginiana*,** insect pests, *Rhopalosiphum padi,* Canada 7436

***Pselaphorhynchites naso*,** insect pests, *Quercus wislizenii,* USA 5745

***Pseudobombax ellipticum*,** wood anatomy 4630

***Pseudobombax munguba*,** seeds, fishes 9233

***Pseudocercospora eucalyptorum*,** fungal diseases, *Eucalyptus,* Madagascar, foliage 7403

***Pseudolarix*,** wood anatomy, parenchyma 4625

***Pseudolarix amabilis*,** cytotaxonomy 7233

***Pseudolmedia oxyphyllaria*,** foliage, anatomy, light intensity, photosynthesis 3731

***Pseudomonas solanacearum*,** bacterial diseases, *Tectona grandis,* forest nurseries, Bangladesh, control 6638

Pseudomonas syringae
- bacterial diseases
  - *Laurus nobilis,* Italy 613
  - *Nerium oleander,* pathogenicity 8316
  - *Parrotia persica,* Iran 8315
  - *Rhaphiolepis umbellata,* galls, Japan, new species 2287
  - Salicaceae, Sweden 8317
  - *Syringa vulgaris,* Italy 613

***Pseudomyrmex concolor*,** insects, *Tachigali myrmecophila,* mutualism, Brazil 2296

***Pseudopanax arboreus*,** frost resistance, plant succession, New Zealand 281

***Pseudopanax crassifolius*,** mixed forests, seed dispersal, New Zealand 487

Pseudoregma
- insect pests
  - bamboos, Thailand 9135
  - *Thyrsostachys siamensis,* thinning, pest resistance, Thailand 1775

***Pseudoregma bambucicola*,** insect pests, bamboos, *Bambusa multiplex,* Japan 9145

***Pseudotsuga*,** wood anatomy, parenchyma 4625

***Pseudotsuga macrocarpa*,** ozone, drought, increment, USA 7107

Pseudotsuga menziesii
- acid deposition, seasonal variation, estimation, Netherlands 3655
- advance growth
  - increment, USA 152
  - liberation felling, USA 2627
- afforestation, agricultural land, forest economics, Italy 158
- air pollution
  - ammonia
    - deposition, Netherlands 2877
    - Netherlands, rhizosphere fungi 1972
  - deposition, throughfall, precipitation, Western Europe 2866
  - plant nutrition, throughfall, Netherlands, nitrogen 5318
  - plant physiology 2862
  - soil chemistry, soil biology, Netherlands, nitrogen 5318
- amenity and recreation areas, USA, hazards, analysis 8455
- biogeochemistry, cycling, USA 2814
- biomass, plant nutrition, stand development, France 7074
- birds, logging, USA, dead trees, ecology 2626
- branches, forest litter, stand density, USA 4500
- buds, flowering, plant morphology, techniques, ionizing radiation 4732
- carbon dioxide enrichment
  - air pollution, ozone, seedling growth 2874
  - plant physiology 4474
- clear felling, forest borders, USA, stand characteristics 1333
- cones, seed orchards, spacing, USA 4265
- container grown plants, roots, Canada, growth 2046
- crown
  - development 411
    - foliage, abscission 7163
- cycling, fertilizers, irrigation, Netherlands 7963
- dead wood
  - decomposition, USA 4497
  - insect pests, Scolytidae, USA, attractants 4893
- dendroclimatology, increment, USA 10161
- diameter, Italy, variation 2685
- fertilizers
  - sewage, soil chemistry, USA 894
  - sewage sludge, nutrient deficiencies, USA 3406
- fishes, water quality, forest ecology, USA 2170
- foliage
  - biochemistry, seasonal variation, USA 1281
  - carotenoids, seasonal variation, photosynthesis, USA 6477

- ***Pseudotsuga menziesii cont.***
  - foliage *cont.*
    - chemistry
      - chlorinated hydrocarbons, measurement 9334
      - esters 1253
      - seasonal variation
        - pest resistance 8093
        - USA 8093
    - optical properties, chlorophyll, photosynthesis 2066
  - forest borders
    - air temperature, simulation, USA 2793
    - microclimate, USA 5347
  - forest fires
    - plant succession, USA 7136
    - stand development, USA 379
  - forest influences, air, canopy, Netherlands 2904
  - forest litter
    - decomposition
      - Canada, nitrogen, availability 7912
      - hydrology, USA 7897
      - volcanic ash, USA 1099
    - nitrogen, mineralization, Canada 6288
    - nutrients, soil properties, Denmark 7962
    - respiration, USA 4496
    - soil chemistry, nitrogen, Canada 9706
  - forest management
    - decision making
      - Canada, computer techniques 1623
      - USA, computer techniques 1623
  - forest plantations
    - cleaning, France 6932
    - increment, USA, forest borders 3483
    - provenance
      - genetic variation
        - isoenzymes
          - France 5488
          - Germany 5488
          - USA 5488
    - silviculture, grazing, France 5876
    - site class assessment, increment, France 9543
    - thinning, France 6129
    - urea fertilizers, snow, Canada, application methods 4301
    - weed control, *Alnus rubra,* USA 1764
    - yield tables, Switzerland, estimation 4412
  - frost injury, cold hardening, simulation, USA 1888
  - frost resistance, photosynthesis, plant nutrition 8820
  - fungal diseases
    - *Armillaria ostoyae,* thinning, USA 10008
    - *Fusarium,* seedborne fungi, stratification, pathogenicity 4854
    - *Fusarium subglutinans,* USA 5645
    - *Gibberella,* seedborne fungi, stratification, pathogenicity 4854
    - *Melampsora medusae,* USA 5659
    - *Mycosphaerella pini,* Serbia 5653
    - *Phaeocryptopus gaeumannii,* Netherlands, spread 1464
    - *Phellinus weirii*
      - Canada, control 9100, 9125
      - grafting, plant composition, disease resistance 1455
      - stand characteristics, USA 4856
      - urea fertilizers, USA 4299
    - stain fungi, USA, disease vectors 5661
    - USA, spread, imports 2303
  - fungicides
    - nontarget effects, ground vegetation, USA 6640
    - translocation, USA 6639
  - genetic variation
    - biomass, USA, increment 2182
    - cambium, phenology, USA 4828
    - chloroplast genetics, restriction fragment length polymorphism, Canada 4827
    - gas exchange, photosynthesis, transpiration, North America 8198

- ***Pseudotsuga menziesii cont.***
  - genetic variation *cont.*
    - isoenzymes
      - genetic erosion 9966
      - Poland 5485
    - plant morphology, USA, increment 2183
  - grafting
    - compatibility, disease resistance, plant composition 1455
    - rootstocks, Canada 2590
  - growth models
    - plant competition
      - Canada 9361
      - weed control, USA 2710
    - uncertainty, analysis 4217
    - USA 8509
  - heartwood, volume determination, equations 989
  - height classes
    - Canada 230
    - USA 229
  - herbicides, UK, tolerance 2645
  - heritability, stem form, France 8215
  - increment
    - height, growth models, Germany 6185
    - nitrogen fertilizers, soil chemistry, USA 3418
    - plant competition, growth models, USA 7675
    - transpiration, simulation, Canada 3000
    - USA, plant competition, *Acer macrophyllum* 5140
  - inheritance, genetic markers 5481
  - insect pests
    - *Choristoneura occidentalis*
      - dendrochronology, USA 6765
      - foliage
        - carbohydrates, terpenoids 5718
        - chemistry, resistance 8093
      - sampling, biological control 5800
      - USA 8093, 9152
    - Coleoptera, USA 7478
    - *Dendroctonus pseudotsugae*
      - USA
        - disease vectors 5661
        - pheromone traps 5735
    - *Hylobius abietis,* France, control 2382
    - Lepidoptera, defoliation, Canada 4047
    - *Megastigmus spermotrophus,* Poland, chemical control 2376
    - *Orgyia pseudotsugata,* USA, damage 7459
    - *Pityophthorus orarius,* USA, seed orchards 7473
    - USA, spread, imports 2303
  - lammas growth, genetic variation, drought, adaptation 4654
  - light penetration, USA, measurement 4472
  - maturation, ontogeny, plant morphology, measurement 4652
  - micropropagation, culture media 122
  - mixtures, site class assessment, yield forecasting, Canada 5177
  - mycorrhizas
    - forest ecology, USA 6610
    - forest litter
      - decomposition 4005
      - USA 5567
    - host specificity 5603
    - *Laccaria bicolor*
      - colonization 9072
      - forest nurseries, persistence 5595
    - *Laccaria laccata*
      - enzymes, nitrogen, metabolism 5577
      - forest nurseries, France, assessment 9992
    - plant nutrition, nitrogen 8273
    - *Rhizopogon,* host specificity 5602
    - rhizosphere, protozoa 5606
    - soil fungi, forest fires, erosion, USA 2243
  - natural regeneration
    - USA, site factors 6103
    - volcanoes, dendrochronology, USA 363

- ***Pseudotsuga menziesii cont.***
  - nitrogen fertilizers
    - forest decline, Netherlands, mycorrhizas 4296
    - plant composition, seasonal variation 1281
    - USA, growth 128
  - nutrient uptake, acid deposition 3631
  - organ culture, maturation, measurement, plant morphology 4653
  - ozone
    - plant physiology, Netherlands 5312
    - soil water, translocation, carbon 1142
  - plant composition, flowering, plant growth regulators, plant nutrition, nitrogen 4672
  - plant growth regulators, seedling growth 3794
  - plant morphology, habit, taxonomy, Poland 1206
  - plant nutrition, nitrogen metabolism, air pollution, Netherlands 5290
  - plant succession, seral stages, increment, USA 4792
  - plant water relations
    - altitude, isotope fractionation 2834
    - soil water, Netherlands, simulation 3568
  - planting
    - soil treatment
      - mycorrhizas, USA 3156
      - soil biology, USA 3156
  - pollen, storage, seed germination, physiology 2103
  - pollination, seed set 8128
  - population dynamics, increment, USA, equations 9962
  - progeny testing, wood properties, shrinkage, Canada 3984
  - provenance, height, growth, analysis 4203
  - pruning
    - wood properties, Germany 8859
    - work study
      - Canada, economics 4358
      - economics 6139
  - roots
    - frost resistance, planting stock, cold storage 3558
    - respiration, soil chemistry 4707
    - soil physical properties, soil parent materials, USA 4486
    - soil water content, plant physiology, growth 1725
  - seed banks, USA, logging, burning 3056
  - seed germination, seed treatment, photoperiodism 6878
  - seed orchards
    - genetic diversity, Canada 5065
    - mating systems
      - genetic variation, France 9038
      - pollen, France, dispersal 9039
    - pollination
      - Canada, methodology 9873
      - contamination, Canada 4813
  - seed treatment, dormancy breaking, chilling, techniques 3384
  - seedlings
    - frost resistance, simulation 9360
    - maturation, measurement, plant morphology 4653
  - sewage, soil chemistry, USA 896
  - shoot cuttings, maturation, measurement, plant morphology 4653
  - shoots, structure, photosynthesis, light, carbon dioxide 8109
  - silviculture
    - forest economics, USA, wood properties 5214
    - Germany 4362
      - conferences 5940
    - New Zealand 2659
  - site class assessment
    - Canada 230
    - equations, USA 233
    - height, Italy 6181
  - site preparation, pesticides, seedling growth, mortality, USA 3589
  - soil chemistry
    - metals, acid deposition, Netherlands 7892

Pseudotsuga menziesii *cont.*
- soil chemistry *cont.*
  - nitrates, USA 3577
  - site class assessment, USA 1903
- soil fertility, fertilizers, USA, DRIS 8794
- soil organic matter
  - dissolved organic matter, Netherlands 1907
  - environment, Netherlands 1093
- soil water, measurement, time domain reflectometry, USA 9688
- spacing, stand density, Italy, volume, biomass 9587
- stand characteristics
  - growth models, USA, forecasting 4221
  - plant competition, yield tables, simulation 6827
- stand density, Germany 2687
- stand structure, microclimate, USA 3459
- stand tables, interspecific competition, weed control, USA 2709
- stumps, Collembola, plant succession, Canada 4028
- subalpine forests, dendrochronology, USA 3291
- thinning
  - Germany 944
  - increment, Germany 9523
  - pruning, Germany 9525
  - understorey, biomass, Canada 3454
- tree breeding
  - genetic gain, increment, Canada 3135
  - genetic variation, seedling growth, USA 9968
  - wood density, phenology, USA 4829
- understorey, USA, development, *Acer circinatum* 5452
- volcanic soils, nutrient deficiencies, USA 7053
- voles
  - *Clethrionomys californicus*
    - truffles, USA 7521
    - USA, habitats 7522
- volume determination
  - Canada, stumps, residues 2684
  - merchantable volume, stem form, equations 1822
- wildlife, birds, New Zealand 6670
- wind damage, Netherlands 1062
- woody weeds
  - weed control
    - USA
      - economic evaluation 171
      - simulation 171

Pseudowintera colorata, essential oils, New Zealand 1806

Psidium guajava
- agroforestry, biomass production, cycling, India 8432
- air pollution, susceptibility, plant physiology, India 2876
- foliage, epidermis, anatomy 7165
- support trees, crops 9269

Psittacula krameri, birds, broadleaved evergreen forests, nature reserves, India 696

Psychotria furcata, water availability, phenology, carbohydrates, Panama 7946

Psychotria horizontalis
- genotype environment interaction
  - precipitation
    - plant morphology, Panama 1880
    - plant physiology, Panama 1880

Psychotria limonensis, water availability, phenology, carbohydrates, Panama 7946

Psychotria marginata, water availability, phenology, carbohydrates, Panama 7946

Psydrax livida, foliage, chemistry, glucosides 9818

Psylliodes ruficolor, insect pests, *Quercus ilex*, Mediterranean Region, new species 659

Pteridium aquilinum, weeds, *Eucalyptus*, simulation, Australia 2508

Pterocarpus angolensis
- seed germination, seedling growth, soil chemistry, carbon, Zambia 5239

Pterocarpus angolensis *cont.*
- seedling growth
  - forest nurseries
    - Tanzania
      - artificial regeneration 9479
      - fertilizers 9479
      - natural regeneration 9479
      - roots, pruning 9479

Pterocarpus indicus
- fungal diseases
  - *Fusarium*, Malaysia, chemical control 7410
  - *Fusarium oxysporum*, Singapore 8296
- multipurpose trees 1203
- plant diseases, lightning, bark, Singapore 9857
- progeny testing, genetic variation, plus trees, Indonesia 6595
- seeds, embryos, storage, cryopreservation 6877
- taxonomy, identification, Indonesia 2113

Pterocarpus macrocarpus, genetic variation, isoenzymes, Thailand 9059

Pterocarpus marsupium, medicinal plants, degraded forests, Sri Lanka 5851

Pterocarpus rohrii
- plant water relations, drought, phenology, Costa Rica 2838
- rain forests, Mexico, wood anatomy 1211

Pterocarpus santalinus, fungal diseases, *Cylindrocladium scoparium*, India, foliage 610

Pterocarpus soyauxii, species trials, agroforestry, soil properties, soil types, Nigeria 6868

Pterocarya
- geographical distribution
  - Asia 7262
  - Europe 7262

Pterocelastrus tricuspidatus, broadleaved evergreen forests, plant competition, increment, synecology, South Africa 223

Pterocomma populeum, insect pests, Argentina 2301

Pteroma plagiophleps, insect pests, *Rhizophora mucronata*, India 9150

Pteropodidae, Chiroptera, *Ficus chrysolepis*, seed dispersal, Philippines 686

Public opinion
- *Eucalyptus*, forest plantations, Spain 5979
- forest management, coniferous forests, nature conservation, Norway 9406
- forestry, forest management, USA 7701
- participation, forest management, planning, USA 7702
- rural communities, national parks, wildlife conservation, Nepal 8442

Public relations
- forest management, planning, USA 8542
- forestry, Germany, conferences 4176

Puerto Rico
- biomass, nutrient reserves, wind damage 996
- broadleaves
  - cloud forests, precipitation, deposition 2789
  - rain forests, wind damage 3561
- Chiroptera, *Artibeus jamaicensis*, feeding behaviour, foliage 6695
- *Cyrilla racemiflora*, forest litter, logs, decomposition 2819
- *Dacryodes excelsa*
  - biomass production, wind damage, simulation 1071
  - canopy gaps, snails 1474
  - rain forests, nutrients, measurement 7080
  - roots, natural grafting 1219
  - soil chemistry, wind damage, simulation 1071
- exotics, plant colonization 1336
- flora 3049
- forest litter
  - cycling, wind damage 1067
  - seedlings, wind damage, botanical composition 1077
- forest trees
  - foliage, nutrients, precipitation 1938
  - wind damage 1073

Puerto Rico *cont.*
- fruits, production, vegetation types 1309
- insect pests, ecology, wind damage, canopy gaps 3177
- landslides, forest trees, ferns, plant succession, plant competition 3872
- *Leucaena leucocephala*, nitrogen fixation, estimation, techniques 8500
- mangroves
  - *Rhizophora mangle*
    - mutations, pigments 5520
    - water pollution, polycyclic aromatic hydrocarbons, mutations 8857
- *Manilkara bidentata*, wind damage, stand structure, recruitment 1076
- multipurpose trees, species trials 1666
- nature conservation, virgin forests 4966
- nitrogen fixing trees, seedling growth, biofertilizers 1713
- *Pinus caribaea*, forest plantations, research 953
- *Prestoea montana*, bottomland forests, wind damage 1066
- rain forests
  - forest litter, soil chemistry, hurricanes 6292
  - soil organic matter, carbon, isotopes 9693
  - wind damage 276
- roots, dynamics, wind damage 1068
- seed dispersal, tropical forests, wind damage 1335
- seeds 3383
- soil chemistry
  - gas exchange
    - clear felling 1070
    - wind damage 1070
- *Swietenia macrophylla × Swietenia mahagoni*, volume tables, forest plantations 2713
- tropical forests
  - *Dacryodes excelsa*, basal area, growth 7825
  - hurricanes, damage 1892
  - roots, wind damage, cycling 3562
- understorey, light, wind damage, pioneer species 1075
- vegetation, landslides, spatial variation, site factors 9767
- wind damage
  - simulation 2801
  - vegetation types, canopy 1074

Pulpwood production
- *Eucalyptus*
  - breeding programmes
    - intensive silviculture, South Africa 553
    - vegetative propagation, South Africa 552
  - species trials, South Africa 2552
- harvesting, nutrients, losses, *Eucalyptus urograndis*, Brazil 9723
- *Picea abies*, forest plantations, agricultural land, wood properties, Sweden 8007
- *Pinus*
  - breeding programmes
    - intensive silviculture, South Africa 553
    - vegetative propagation, South Africa 552
- *Pinus maximinoi*, provenance trials, South Africa 60
- quality, *Eucalyptus grandis*, soil properties, India 283
- *Robinia pseudoacacia*, intensive silviculture, biomass production, Korea Republic 8710

Pulvinaria regalis, insect pests, amenity trees, UK, biology 5697

Punica granatum, mites, *Eriophyes*, galls, India 2371

Purshia tridentata, root nodules, inoculation 4841

Pycnanthus angolensis, rain forests, forest litter, chemistry, decomposition, Nigeria 3578

Pyracantha
- geographical distribution
  - Asia 7262

- ***Pyracantha*** *cont.*
  - geographical distribution *cont.*
    - Europe 7262
- ***Pyracantha coccinea,*** insect pests, *Aphis,* biological control, natural enemies 4899
- ***Pyrenochaeta ligni-putridi,*** fungal diseases, *Picea abies,* Switzerland 5631
- ***Pyrrhalta luteola***
  - insect pests
    - Argentina 2301
    - *Ulmus*
      - Argentina, biology, damage 2338
      - Australia 4980, 5787
        - bacterial insecticides 5790
        - biological control 5788
        - insecticides 5789
      - USA 7486
        - control 5798
        - parasitoids 5691
    - *Ulmus minor,* Uzbekistan, control 657
    - *Ulmus pumila,* USA, control 4046
- ***Pyrus***
  - geographical distribution
    - Asia 7262
    - Europe 7262
  - taxonomy, nomenclature, geographical distribution, bibliographies 7221
- ***Pyrus calleryana,*** street trees, USA, growth, assessment 4986
- ***Pyrus communis,*** seed germination, seed treatment, storage, Poland 849
- ***Pyrus pyraster***
  - genetic resources
    - Asia 7366
    - Europe 7366
- ***Pythium***
  - fungal diseases
    - *Eucalyptus*
      - South Africa 8291
        - reviews 1452
    - *Eucalyptus urophylla,* Indonesia, chemical control 1502
    - *Pinus*
      - South Africa 8291
        - reviews 1452
    - *Pinus nigra,* forest nurseries, Italy, control 1467
- ***Pythium dimorphum,*** fungal diseases, *Picea abies,* seedlings, plant physiology 9087
- ***Pythium irregulare,*** fungal diseases, *Pinus patula,* seedlings, South Africa 5622
- ***Pythium splendens,*** fungal diseases, *Eucalyptus grandis,* South Africa, pathogenicity 5632
- **Qatar,** medicinal plants, books 3295
- ***Quadricalcarifera punctatella***
  - insect pests
    - *Fagus crenata*
      - Japan 7454
        - predators, population dynamics 9159
- ***Qualea paraensis,*** natural regeneration, hurricanes, Nicaragua 3438
- ***Quararibea asterolepis,*** forest litter, decomposition, drought, Panama 1916
- ***Quararibea funebris,*** rain forests, Mexico, wood anatomy 1211
- ***Quassia simarouba***
  - gas exchange, light, Guadeloupe, adaptation 4682
  - reclamation, mined land, species trials, India 3246
  - respiration, Costa Rica 8929
  - sex, forest influences, soil chemistry, phosphorus, Costa Rica 5350
  - tissue culture, somatic embryogenesis 115, 5091
  - wind damage, Guadeloupe, susceptibility 1063
- ***Quercus***
  - agroforestry
    - coppice, management, France 5877
    - history, Germany, economics 782
  - birds, *Garrulus glandarius,* seed dispersal, Germany 1307
  - bottomland forests, dead trees, USA, birds, feeding behaviour 6680
  - canopy gaps, natural regeneration, Japan, botanical composition 9021
- ***Quercus*** *cont.*
  - control, woody weeds, herbicides, USA 1767
  - coppice
    - France, research 8615
    - Italy, research 8616
    - silvicultural conversion, Greece, geographical distribution, management 8618
  - deciduous forests
    - forest litter
      - decomposition, UK 7905
      - UK 7904
    - synecology, climate, Spain 3903
  - deer, *Cervus elaphus,* France, ecology, stand characteristics 7538
  - degraded forests, forest decline, urban areas, Korea Republic 9312
  - foliage, air pollution, organic compounds, USA 7105
  - forest decline
    - diseases, Europe, reviews 4720
    - drought, soil water, Spain 8120
    - France 3812
    - Spain 9861
  - forest influences, soil fauna, arthropods, Japan 9714
  - forest litter
    - *Ailanthus altissima,* plant succession, USA 4791
    - decomposition
      - nutrients, heavy metals, Sweden 9700
      - Spain 7909
    - soil organic matter, USA, nitrogen, mineralization 5254
  - forest plantations, truffles, production, economics, Spain 1807
  - forests
    - synecology
      - Poland 1380
      - stand structure, natural regeneration, India 2167
  - fungal diseases
    - *Ceratocystis fagacearum*
      - Europe, spread 8299
      - USA 1459
        - resistance 4862
    - *Ophiostoma,* forest decline, Europe 4020
  - genetic diversity, chloroplast genetics, statistics, theory 7374
  - genetics
    - breeding programmes
      - Europe, conferences 3306
      - North America, conferences 3306
  - hurricanes, dangerous trees, USA, assessment 3286
  - insect pests
    - *Altica quercetorum,* Spain 5760
    - *Antheraea yamamai,* China, biology 7457
    - *Coccinella septempunctata,* Hungary, ecology 9165
    - *Curculio,* Japan, parasitoids 658
    - *Lymantria dispar*
      - Germany 10057
      - insecticides, toxicity 9191
      - USA
        - control 5786, 5799
        - defoliation 3725
        - physical control 7498
    - *Macrodiplosis,* Irish Republic 5682
    - *Mecorhis ursulus,* Korea Republic, biology 9163
    - *Operophtera brumata,* Belgium, ecology 5717
    - *Tortrix viridana,* Ukraine, parasitoids, *Trichogramma telengai* 1484
  - insecticide residues, diflubenzuron, USA 9199
  - landscape, forest fragmentation, USA 7280
  - liberation felling, mixed forests, USA, insect pests, *Pissodes strobi* 924
  - logging
    - damage, soil density, USA 2895
    - USA, understorey, ferns 1392
- ***Quercus*** *cont.*
  - mixed forests
    - atmosphere
      - isoprenoids
        - emission
          - simulation 8011
          - USA 8011
    - understorey, quality, Poland 1816
  - mountain forests
    - deforestation, agroforestry, Costa Rica 7575
    - plant succession, species diversity, Costa Rica 5460
  - mycorrhizas, woodlands, Netherlands 9084
  - natural regeneration, fires, USA 3699
  - palaeoecology, plant succession, Greece 8989
  - plant parasitic nematodes, *Meloidogyne,* USA, susceptibility 3188
  - planting stock, planting, Germany 9497
  - pollen, vegetation, simulation, USA 4805
  - regeneration, USA, conferences 2474
  - salamanders, clear felling, USA, population dynamics 3195
  - selective felling, forest ecology, Canada, plant colonization 3427
  - silvicultural systems, stand characteristics, Belgium 949
  - silviculture
    - Germany, conferences 5940
    - research, conferences 4180
  - soil biology, algae, Ukraine, forest steppe 1106
  - soil formation, Italy 8783
  - soil fungi, keratinophilic fungi, Slovakia 1922
  - stand characteristics, geographical variation 3936
  - taxonomy, USA 3851
  - thinning
    - birds, USA, ecology 1524
    - USA, stand development, growth 174
    - yield forecasting, USA 2712
  - understorey, plant succession, USA, botanical composition 4783
  - weed control
    - herbicides, USA 942
    - USA, herbicides 8643
  - wildlife
    - *Alces alces,* browse, forests, Poland 7534
    - habitats, simulation, USA 4901
  - wood anatomy
    - palaeoecology, Japan 8990
    - wood properties 7153
- ***Quercus acuminata,*** wood anatomy 403
- ***Quercus acutissima***
  - forest plantations, weed control, herbicides, USA 172
  - insect pests, *Cyclophragma yamadai,* Japan, biological control, nuclear polyhedrosis viruses 6650
  - mycorrhizas
    - *Hebeloma cylindrosporum,* morphology 6613
    - *Pisolithus tinctorius,* morphology 6613
  - shade trees, USA, evaluation 8457
  - stems, pruning, transplanting, growth 3773
  - stumpage value, Korea Republic 8748
  - tissue culture, micropropagation 5071
- ***Quercus afares,*** dendroclimatology, Mediterranean Region 3288
- ***Quercus agrifolia***
  - gas exchange, methodology 3318
  - reproductive behaviour, seed production, USA, variation 4733
  - seed production, USA, measurement, methodology 4190
  - understorey, synecology, USA 7305
- ***Quercus alba***
  - afforestation, mined land, reclaimed land, USA 9539
  - air pollution, mercury, foliage, gas exchange 8852
  - bacterial diseases, *Xylella fastidiosa,* USA 8314
  - canopy, solar radiation, USA, defoliation 3725

Quercus alba *cont.*
- clear felling, natural regeneration, USA 147
- foliage, optical properties 7032
- forest influences, throughfall, USA 2903
- forest litter, fungi, crystals, USA 8251
- frost resistance, climate, simulation, USA 800
- insect pests
  - birds, USA, growth 4908
  - *Lymantria dispar*
    - Canada, biological control 677
    - USA, biology 645-646, 5733
  - USA, damage, simulation 1475
- insecticide residues, diflubenzuron, USA 9199
- light, soil water, increment, USA 5181
- natural regeneration, understorey, canopy, USA 3118
- planting stock, reclamation, mine spoil, USA 5849
- pruning, profitability, USA 6363
- soil texture, fine fraction, biomass production, USA 1091
- stems, respiration, carbon dioxide enrichment 6475
- streams, forest litter, decomposition, USA 8781
- tree breeding, early selection, USA 6602
- volume determination, taper, estimation, USA 4382

Quercus aliena, insect pests, *Chilocorus rubidus,* Japan 9168

Quercus baloot, foliage, India, tannins 1244

Quercus borealis (*see Quercus rubra)*

Quercus broteroi, foliage, trichomes, Southern Europe 6403

Quercus calliprinos
- foliage, buffering capacity, acid rain 3691
- forest litter, soil chemistry, Israel 5257

Quercus canariensis
- dendroclimatology, Mediterranean Region 3288
- foliage, trichomes, Southern Europe 6403

Quercus castaneifolia
- insect pests, Cynipidae, UK 6662
- plantations, increment, Azerbaijan 1004

Quercus cerris
- bark, chemistry, esters 1253
- coppice
  - silvicultural conversion
    - Italy 8608
      - forest litter, leaf area index 8664
      - leaf area index, estimation 8898
    - plant physiology, Italy 8935
    - soil properties, Italy 8792
    - stand structure, Italy 8609-8610
- deciduous forests, stand characteristics, Italy 6546
- degraded forests, reclamation, Albania 6707
- firebreaks, agroforestry, Italy 3273
- foliage
  - measurement, Italy, equations 9582
  - texture, plant nutrition, Turkey 1224
- forest decline, crown, Italy 3025
- forest management, Italy 7833
- fungal diseases, forest decline, drought resistance, Italy 8119
- insect pests
  - *Andricus quercuscalicis,* spread, population genetics 2360
  - Cecidomyiidae, Austria, galls 5770
- micropropagation 5080
- photosynthesis, plant water relations, Italy 7194
- plant water relations, cavitation, wood anatomy 7068
- pollen, immunoprecipitation tests, chemotaxonomy 423
- seedlings, sap flow, measurement 3618
- silvicultural conversion, agroforestry, Italy 1558
- stand characteristics, Italy 8658
- stand development, climate, light, phenology, Italy 8665
- vegetation, surveys, soil types, Italy 303

Quercus chrysolepis
- forest fires, mortality, simulation, USA 380
- reproductive behaviour, seed production, USA, variation 4733
- volume determination, USA, equations 4390

Quercus coccifera
- agroforestry, goats, Greece 9286
- broadleaved evergreen forests, forest fires, Greece, fire ecology 9000
- browse, Mediterranean Region, phenolic compounds, techniques 437
- foliage, trichomes, Southern Europe 6403
- forest fires
  - cycling, France 4612
  - simulation, Portugal 7132-7133
- forest litter, decomposition, chemical composition 295
- geographical distribution, Italy 9918
- maquis, forest fires, grazing, Greece 683
- sclerophyllous scrub, habit, Spain 3705
- stand development, Greece 4803
- stomata, photosynthesis, transpiration, diurnal variation 456
- vegetation types, synecology, Portugal 7289

Quercus coccinea
- air pollution, dust, photosynthesis, plant water relations, Greece 6331
- bare rooted stock, transplanting, water stress, antitranspirants, defoliation 5286
- fertilizers, lime, dendrochronology, wood chemistry, USA 1590
- forest decline
  - dendrochronology, USA 9863
  - forest management, USA 6504
- forest fires, garrigue, simulation, France 2921
- phenology
  - roots, transplanting 5908
  - USA 6390
- pruning, profitability, USA 6363
- transplanting, USA, survival, seasonal variation 5907
- weed control, herbicides, USA, equipment 4345

Quercus conferta (*see Quercus frainetto)*

Quercus crispula
- crown, canopy, plant morphology 8065
- deciduous forests, Japan 7276
- heartwood, injuries, discoloration, wood chemistry, trace elements 8092
- insect pests
  - Curculionidae, seeds, Japan, damage 10037
  - *Tetranychus quercivorus,* Japan 9178
  - Tortricidae, seeds, Japan, damage 10037
- monkeys, *Macaca fuscata,* seed production, Japan 689
- seedlings, light, photosynthesis, understorey, Japan 6255
- seeds, storage 3376
- selective felling, natural regeneration, stand development, Japan, logging effects 6910
- soil air, carbon dioxide, snow cover, Japan 8768
- stand structure, Japan, climax communities, spatial distribution 8157
- stem form, snow, Japan, resistance 2954
- wood anatomy, wetwood 8895

Quercus dalechampii
- phenology, Slovakia 7144
- pollen, immunoprecipitation tests, chemotaxonomy 423

Quercus dentata, humus, formation, volcanic soils, Japan 5261

Quercus devia, synecology, forest management, Mexico 4773

Quercus douglasii
- bare rooted stock, USA, mortality, growth 1720
- natural regeneration, drought resistance, plant competition, USA 4517
- recruitment, USA 3112
- reproductive behaviour, seed production, USA, variation 4733
- roots, seedlings 3726

Quercus douglasii *cont.*
- seed production, USA, measurement, methodology 4190
- volatile compounds, USA 3740

Quercus dumosa
- forest influences, soil chemistry, USA 5360
- insect pests, *Andricus californicus,* USA, host parasite relationships 2362

Quercus durata, gas exchange, methodology 3318

Quercus ellipsoidalis
- forest fires, arthropods, ecology, USA 2004
- fungal diseases, *Ceratocystis fagacearum,* USA, control 3170
- increment, topography, soil properties, USA 5235
- insect pests, *Lymantria dispar,* USA, biology 646

Quercus emoryi
- forest influences, understorey, USA 1184
- insect pests, *Cameraria,* USA, damage 642
- natural regeneration, site types, USA 7325

Quercus engelmannii, insect pests, *Andricus californicus,* USA, host parasite relationships 2362

Quercus faginea
- coppice
  - Portugal, forest resources 8612
  - Spain, resources, management 8613
- foliage, trichomes, Southern Europe 6403
- forests
  - Formicidae, Spain 9130
  - synecology, Spain 8158
- Spain 2925
- water stress, plant physiology, Spain 1114

Quercus falcata
- bacterial diseases, *Xylella fastidiosa,* USA 2288
- forest plantations, weed control, herbicides, USA 172
- pruning, profitability, USA 6363
- stand characteristics, growth models, USA, forecasting 4221

Quercus falcata **var.** ***pagodifolia***
- nutrient reserves, USA, bottomland forests 3626
- tree classes, USA, bottomland forests 9575

Quercus fenestrata, wood anatomy 403

Quercus floribunda
- forests
  - grazing, fodder, production, India 682
  - soil biology, forest litter, respiration, India 6294
  - synecology, stand structure, natural regeneration, India 2167
- mistletoes, *Loranthus,* age of trees, India 617
- soil chemistry
  - humic acids, soil fertility, India 286
  - India 1902

Quercus frainetto
- coppice, silvicultural conversion, Greece, geographical distribution, management 8618
- fungal diseases, forest decline, drought resistance, Italy 8119
- pollen, immunoprecipitation tests, chemotaxonomy 423
- silvicultural characters, stand characteristics, geographical distribution, Italy 6391

Quercus gambelii
- plant water relations, precipitation, USA 6303
- wildlife, *Erethizon dorsatum,* USA, resource utilization 6675

Quercus garryana, fungal diseases, *Discula quercina,* USA, infection 5656

Quercus glauca
- foliage, India, tannins 1244
- mycorrhizas, Taiwan 3158

Quercus glaucoides, stand structure, stability, USA 550

Quercus gravesii, forest litter, fungi, crystals, USA 8251

***Quercus grisea* × *Quercus gambelii*,** insect pests, *Phyllonorycter,* USA, parasites 5719

Quercus havardii
- seedling growth
  - soil biology
    - USA
      - Formicidae 5272
      - mycorrhizas 5272

Quercus ilex
- abandoned land, stand characteristics, botanical composition, mapping, Spain 7849
- biomass production, plant water relations, gas exchange, plant nutrition, Spain 3793
- canopy, stand structure, plant water relations, Spain 2840
- carbon dioxide enrichment, plant composition, photosynthesis, Italy 4465
- coastal areas, air pollution, Italy, salt spray, surfactants 8837
- coppice
  - France, research, growth, ecology 8614
  - plant succession, France 4317
  - Spain, resources, management 8613
- dehesa grasslands
  - rangelands, botanical composition, Spain 9924
  - water balance, Spain 4077
- fertilizers, irrigation, Spain, interactions 3415
- foliage
  - chlorophyll, Italy, methodology 781
  - fertilizers, irrigation, Spain, plant composition 3752
  - optical properties, plant composition, analytical methods 1234
  - stomata, density, carbon dioxide enrichment, Italy 2048
  - trichomes, Southern Europe 6403
- forest decline, crown, Italy 3025
- forest litter
  - decomposition
    - chemical composition 295
    - soil pollution, heavy metals, Italy 7908
- forest plantations
  - establishment, mortality, seasonal variation, Spain 1746
  - height, increment, climate, Spain 1826
- forests
  - forest plantations, multiple land use, species diversity, Spain 8407
  - Formicidae, Spain 9130
  - synecology, Spain 8158
- fungal diseases, foliage, Europe 5654
- genetic variation, isoenzymes 8244
- goats, *Capra pyrenaica,* Spain 10058
- insect pests, *Psylliodes ruficolor,* Mediterranean Region, new species 659
- landscape, remote sensing, France 3508
- nutrient content, Spain, variation 7957
- photosynthesis, water stress, Italy 6256
- plant physiology
  - methodology, fluorescence 1282
  - remote sensing 1038
- plant water relations, cavitation, climatic factors, geographical distribution, Sicily 3613
- sclerophyllous forests, water stress, drought, watersheds, Spain 1122
- soil biology, Collembola, Spain 1921
- soil water, Spain, chemistry 5249
- thinning, increment, Spain 2653
- vegetation, surveys, soil types, Italy 303
- vegetation types, seed dispersal, birds, plant succession, France 3092
- volatile compounds, light, monoterpenes 4691
- water quality, acid deposition, sulfur, logging, Spain 7548
- water stress
  - France, distribution 3610
  - UK, distribution 3610

***Quercus ilicifolia*,** defoliation, plant nutrition, cycling, USA 322

Quercus imbricaria
- bacterial diseases, *Xylella fastidiosa,* USA 8314
- bark, thickness, fire resistance, USA 1197
- species trials, USA 68
- weed control, USA, herbicides 8643

***Quercus incana*,** mixed forests, synecology, topography, India 7269

Quercus ithaburensis
- foliage, phenology, genetic variation, Israel 3709
- nitrogen fixation, *Azospirillum brasilense,* Israel, seedling growth 7407

Quercus kelloggii
- forest fires, mortality, simulation, USA 380
- reproductive behaviour, seed production, USA, variation 4733
- thinning, epicormics, USA 2946

***Quercus laevis*,** photosynthesis, water use efficiency, plant nutrition, USA 6483

***Quercus lanceaefolia*,** wood anatomy 403

Quercus laurifolia
- bacterial diseases, *Xylella fastidiosa,* USA 2288
- photosynthesis, water use efficiency, plant nutrition, USA 6483
- roots, container grown plants, morphology, growth 1733

Quercus leucotrichophora
- biomass production, cycling, India 3864
- degraded forests, plant succession, India 3254
- foliage
  - India, tannins 1244
  - nutrients, variation, India 429
- forests
  - deforestation, synecology, ground vegetation 535
  - grazing, fodder, production, India 682
  - soil biology, forest litter, respiration, India 6294
  - synecology, stand structure, natural regeneration, India 2167
- mistletoes, *Loranthus,* age of trees, India 617
- soil chemistry, humic acids, soil fertility, India 286
- throughfall, stemflow, interception, India 706

Quercus lobata
- recruitment, USA 3112
- reproductive behaviour, seed production, USA, variation 4733
- seed production, USA, measurement, methodology 4190

***Quercus longipes*,** plantations, increment, Azerbaijan 1004

***Quercus lusitanica*,** foliage, trichomes, Southern Europe 6403

***Quercus lyrata*,** shade trees, USA, evaluation 8457

Quercus macrocarpa
- bacterial diseases, *Xylella fastidiosa,* USA, new host records 8314
- bark, thickness, fire resistance, USA 1197
- foliage, light, temperature, USA 3791
- forest fires, arthropods, ecology, USA 2004
- gene mapping, polymerase chain reaction, USA 9061
- insect pests, *Disholcaspis quercus-mamma,* street trees, USA 7491
- light, photosynthesis, stomatal movement 2991
- mulches, herbicides, plant nutrition, Canada 5135

***Quercus marilandica*,** woodlands, birds, nesting, USA 6679

***Quercus michauxii*,** nutrient reserves, USA, bottomland forests 3626

Quercus mongolica
- forests, soil pollution, heavy metals, Russia 7977
- insect pests, Cynipidae, UK 6662

Quercus muehlenbergii
- bark, thickness, fire resistance, USA 1197
- foliage, light, temperature, USA 3791

Quercus nigra
- bacterial diseases, *Xylella fastidiosa,* USA 2288
- forest plantations, weed control, herbicides, USA 172
- nutrient reserves, USA, bottomland forests 3626
- plant growth regulators, USA, biomass, growth 3781
- rights of way, USA, control, plant growth regulators 941
- tree classes, USA, bottomland forests 9575

Quercus nuttallii
- forest plantations, weed control, herbicides, USA 172
- nutrient reserves, USA, bottomland forests 3626

***Quercus pachyphylla*,** wood anatomy 403

Quercus palustris
- bacterial diseases, *Xylella fastidiosa,* USA 8314
- dieback, USA, foliage, chemical composition 3020
- forest plantations
  - pseudogleys, increment, Slovenia 2695
  - weed control, herbicides, USA 172
- reclamation, mined land, tillage, USA 4093
- root systems, NPK fertilizers, development, density 3407
- seedlings, water stress, drought resistance 4520

Quercus petraea
- carbon dioxide enrichment, photosynthesis, photosystem II, interactions 2070
- cycling
  - calcium, Belgium, leaching 3624
  - fertilizers, France 8779
- degraded forests, reclamation, Albania 6707
- dendrochronology
  - climate, carbon dioxide enrichment, France, simulation 4466
  - increment, France 3290
- direct sowing
  - thinning, Poland 6107
  - underplanting, Germany 9498
- earlywood, wood anatomy, vessels, France 4639
- fertilizers
  - lime, ground vegetation, Germany 8591
  - water quality, Germany 884
- foliage, enzymes, isoenzymes, seasonal variation, UK 3770
- forest decline
  - air pollution, soil chemistry, plant nutrition, Austria 5309
  - Belgium, monitoring 8940
  - France 3811
  - mountain forests, Croatia 4722
  - mycoplasmal diseases, Austria, phloem 8115
  - symptoms, precipitation, Poland 1298
- forest economics, prices, Germany, growth effects 4589
- forest health, Belgium, monitoring 8940
- forest influences, atmosphere, Austria, volatile compounds 8015
- forest litter
  - decomposition, Poland, chemistry 7901
  - streams, UK, fauna 5252
- fungal diseases
  - *Armillaria cepistipes,* Hungary 2267
  - *Ophiostoma querci,* cavitation 4511
- genetic variation
  - isoenzymes, Europe 9060
  - population genetics, isoenzymes, Europe 5557
- ground vegetation, soil chemistry, France 3090
- group fellings, canopy gaps, plant succession, Germany 8607
- group planting
  - Germany 9499
  - thinning, Poland 6107

***Quercus petraea** cont.*

- growth, carbon dioxide enrichment, water stress, transpiration, interactions 1928
- height, diameter, France, equations 4405
- hybrids, foliage, trichomes, taxonomy 1215
- in vitro culture, cold storage 8580
- increment 1007
  - variation, Germany 997
- insect pests, *Agrilus biguttatus,* Germany 10048
- isoenzymes, population genetics, Germany 9988
- molecular genetics, France 2216
- mycorrhizas, soil chemistry, forest decline, Romania 8773
- natural regeneration, *Larix decidua,* soil chemistry, Germany 8660
- plant nutrition 2850
- plant water relations
  - measurement 7070
  - soil water
    - France 7952
    - simulation 7951
- planting stock, UK 2635
- pollen, immunoprecipitation tests, chemotaxonomy 423
- population genetics, France 594
- provenance trials, phenology, frost resistance, UK 9412
- root systems
  - Germany, spatial distribution 4661
  - plant water relations, soil water, France 5280
- roots, dendrochronology, Germany 6760
- seedlings, sap flow, measurement 3618
- seeds
  - periodicity
    - dendrochronology, Germany 782
    - history, Germany 782
- shoot cuttings, branching, selection criteria, plant morphology 5374
- silviculture
  - Belgium, books 4159
  - France, books 4159
  - site factors, Belgium, wood properties 8860
  - wood properties, simulation, France 4588
- species trials, forest plantations, grazing, France 5884
- stems
  - frost injury, assessment 4476
  - water uptake, sap flow, measurement 4523
- taxonomy, plant morphology, habit, Poland 2114
- thinning, plant water relations, France, effects 7066
- tissue culture, micropropagation, explants, culture media 6054
- understorey, natural regeneration, Germany, *Pinus sylvestris* 925
- vegetation types
  - Czech Republic 4776
  - Germany 9935
  - synecology, Croatia, mountain forests 4774
- volume, increment, bark, Spain, equations 5961
- water stress
  - drought resistance, France 2830
  - hydraulic resistance, measurement 4512
- wood anatomy, growth rings, Poland 4636
- wood chemistry
  - age, tannins 8089
  - ellagitannins, distribution 4663
  - heartwood, age, tannins 8090
  - heavy metals, air pollution, Germany, methodology 7653
  - variation, height 9824
- wood properties, genetic variation, France 4595

***Quercus petraea* × *Quercus robur*,** taxonomy, plant morphology, habit, Poland 2115

Quercus phellos

- forest plantations, weed control, herbicides, USA 172
- plant growth regulators, USA, biomass, growth 3781
- rights of way, USA, control, plant growth regulators 941
- tree classes, USA, bottomland forests 9575

***Quercus polycarpa*,** pollen, immunoprecipitation tests, chemotaxonomy 423

Quercus prinus

- canopy, solar radiation, USA, defoliation 3725
- forest litter, decomposition, USA 3584
- insect pests
  - *Lymantria dispar*
    - biological control, tannins 7508
    - feeding behaviour, site factors 2323
    - plant nutrition, USA, resistance 7446
- insecticide residues, diflubenzuron, USA 9199
- shade trees, USA, evaluation 8457
- water stress, osmoregulation 2842

Quercus pubescens

- aerial photography, infrared photography, Italy, forest health 6232
- carbon dioxide enrichment, plant composition, photosynthesis, Italy 4465
- dendroclimatology, Mediterranean Region 3288
- firebreaks, agroforestry, Italy 3273
- foliage, optical properties, plant composition, analytical methods 1234
- forest decline, crown, Italy 3025
- forest litter, decomposition, chemical composition 295
- forests, grazing, fodder, production, India 682
- fungal diseases, forest decline, drought resistance, Italy 8119
- hybrids, foliage, trichomes, taxonomy 1215
- insect pests, Cynipidae, UK 6662
- landscape, remote sensing, France 3508
- mistletoes, *Loranthus,* age of trees, India 617
- mycorrhizas, *Tuber magnatum,* Italy 6609
- phenology, synecology, Italy 9957
- plant physiology, remote sensing 1036
- pollen, immunoprecipitation tests, chemotaxonomy 423
- thinning, agroforestry, France, simulation, growth 9268
- vegetation types, Germany 9935
- water stress, hydraulic resistance, measurement 4512

Quercus pyrenaica

- bioclimate, geographical variation 1876
- biomass production, forest litter, stand density, climate, Spain 1824
- birds, *Lanius,* Spain, ecology 8373
- canopy, leaf water potential, transpiration, Spain 1933
- controlled burning, forest litter, cellulose, decomposition, Portugal 7140
- coppice
  - Portugal, forest resources 8612
  - Spain, resources, management 8613
- dehesa grasslands
  - ground vegetation, Spain 1384
  - synecology, agroforestry, Spain 8433
- epiphytes, Spain, synecology 1388
- forest fires, forest litter, cellulose, decomposition, Portugal 7140
- forest litter
  - decomposition
    - nutrients, Spain 6291
    - Spain 9699
- forests
  - forest plantations, multiple land use, species diversity, Spain 8407
  - Formicidae, Spain 9130
- insect pests, *Tortrix viridana,* Spain, control, nontarget effects 9197
- mountain forests, birds, ecology, Spain 8371

***Quercus pyrenaica** cont.*

- wildlife, birds, Spain, feeding behaviour 8368

Quercus robur

- acid deposition, seasonal variation, estimation, Netherlands 3655
- afforestation, Germany, carbon cycle 8866
- air pollution
  - damage, Germany, waxes 5333
  - increment, dendrochronology, Poland 7612
  - sulfur dioxide, salt injury, Europe 3644
- allelopathy, plant composition, forest litter, Spain 7315
- artificial regeneration, Russia, sowing, stumps 934
- autecology, simulation 3326
- bark
  - anatomy 4624
  - crystals, diagnostic value 6410
- bottomland forests, natural regeneration, wild pigs, agroforestry, Croatia 3268
- cleaning, Germany 6121
- Coleoptera, Germany, dead wood 1472
- cycling, calcium, Belgium, leaching 3624
- cytogenetics 5950
- degraded forests, synecology, national parks, Poland 2140
- dendrochronology
  - air pollution, Sweden 6759
  - climate, carbon dioxide enrichment, France, simulation 4466
  - increment, France 3290
  - Italy, drought, adaptation 4508
- dendroclimatology, Mediterranean Region 3288
- direct sowing, thinning, Poland 6107
- earlywood
  - latewood, cellulose, metabolism, UK 9853
  - wood anatomy, vessels, France 4639
- explants, in vitro culture 4276
- fertilizers, lime, ground vegetation, Germany 8591
- foliage, development, genetic variation, Croatia 4616
- forest decline
  - air pollution, soil chemistry, plant nutrition, Austria 5309
  - Belgium, monitoring 8940
  - bottomland forests, Croatia, environmental factors 4726
  - drought
    - Poland
      - fungal diseases 1299
      - insect pests 1299
  - France 3811
  - Germany 6505
  - mycoplasmal diseases, Austria, phloem 8115
  - silvicultural conversion, Croatia 6502
  - silviculture, Croatia 4725
  - stand characteristics, Croatia 4724
  - symptoms, precipitation, Poland 1298
- forest health
  - Belgium, monitoring 8940
  - UK, forest decline 6501
- forest litter
  - cycling, Sweden 2820
  - decomposition
    - Poland, chemistry 7901
    - Spain, phytotoxicity 7313
  - extracts, acidity, chelation, metal ions 8788
  - nutrients, soil properties, Denmark 7962
- forest nurseries
  - containers, Germany 9475
  - herbicides, UK, tolerance 2644
- forest plantations, mixtures, Italy, growth 8626
- forests
  - forest plantations, multiple land use, species diversity, Spain 8407
  - plant succession, Poland 1396
- frost resistance, roots, Russia 279
- fruits, edible species, cooking, palatability 1810

***Quercus robur** cont.*
- fungal diseases
  - *Ceratocystis,* Poland, forest decline, control 1299
  - *Microsphaera alphitoides,* Netherlands, acid deposition 3655
  - *Ophiostoma querci,* cavitation 4511
  - *Ophiostoma roboris,* Europe 7398
  - *Phytophthora,* forest decline, Germany 8292
  - Switzerland, mixed infections 9092
- genetic variation
  - isoenzymes, Finland 8233
  - population genetics, isoenzymes, Europe 5557
- group planting
  - Germany 9499
  - thinning, Poland 6107
- growth rings, Germany, cadmium 6458
- herbicides, UK, tolerance 2645
- in vitro culture, cold storage 8580
- increment 1007
  - height, growth models, Germany 6185
- insect pests
  - *Agrilus biguttatus,* Germany 10048
  - *Curculio,* seeds, Croatia 4891
  - *Erannis defoliaria,* France, biology, population dynamics 2316
  - Lepidoptera, Russia, damage 10039
  - *Operophtera brumata*
    - France, biology, population dynamics 2316
    - Russia, foliage, regeneration 10040
  - *Schueziella quercicola,* galls, Germany 7494
  - *Tortrix viridana,* Poland, forest decline 1299
- insects, Lepidoptera, Finland, food plants 2299
- isoenzymes, population genetics, Germany 9988
- light
  - biochemistry, growth 2993
  - plant morphology, Germany, growth 7028
- micropropagation 5080
  - Italy, techniques 6058
- mined land, Germany, clay soils 1538
- mixed forests, natural regeneration, synecology, Poland 8179
- mixtures
  - forest plantations, Ukraine 1783
  - silviculture, Ukraine 1785
  - UK, growth, *Larix decidua, Picea abies* 5155
- molecular genetics, France 2216
- mycoplasma-like organisms, Germany 2291
- mycorrhizas
  - *Laccaria laccata,* carbon dioxide enrichment 5582
  - *Tuber,* interface, ultrastructure 4001
- natural regeneration
  - coppicing, Russia 4328
  - Croatia 4808
  - Germany, silvicultural conversion 4322
  - seed production, seed predation, UK 3031
- nutrient deficiencies, magnesium, reviews 9732
- phenology, climatic change, Europe 4618
- photosynthesis
  - air pollution, ozone 1969
  - chlorophyll 3788
- plant competition, nature reserves, Germany 9956
- plant morphology, habit, taxonomy, Poland 1322
- plant nutrition, riparian forests, flooding, France 3640
- plant water relations
  - soil water
    - France 7952
    - simulation 7951
- planting stock, root pruning, seedling growth, root systems 3424
- pollen, immunoprecipitation tests, chemotaxonomy 423

***Quercus robur** cont.*
- population genetics
  - France 594
  - Moldova, foliage, morphology 9054
- recalcitrant seeds
  - chemistry, proteins 3832
  - plant physiology 77
  - plant water relations, seed germination 3390
- root systems
  - development 2962
  - plant water relations, soil water, France 5280
- roots, dendrochronology, Germany 6760
- seed germination, plant physiology 3012
- seed production, predation, natural regeneration, recruitment, UK 9023
- seedling growth, root zone temperature 6275
- seedlings
  - biomass distribution, soil water 7155
  - carbon dioxide enrichment, gas exchange, photosynthesis, growth 6470
  - nutrient allocation, carbon 3620
  - sap flow, measurement 3618
  - waterlogging, water stress, photosynthesis, pot experimentation 4685
- seeds
  - periodicity
    - dendrochronology, Germany 782
    - history, Germany 782
- silviculture
  - Belgium, books 4159
  - France, books 4159
  - site factors, Belgium, wood properties 8860
  - Ukraine 2661
  - wood properties, simulation, France 4588
- site types, vegetation types, Germany 4769
- soil chemistry, plant nutrition, minerals, Netherlands 320
- soil formation, Denmark, weathering 8016
- soil pH, soil organic matter, Sweden 2816
- soil physics, Russia 8772
- soil water, water stress, leaf water potential, France 1935
- species trials, forest plantations, grazing, France 5884
- squirrels, *Sciurus,* UK, competitive ability 2389
- stand characteristics, plant competition, yield tables, simulation 6832
- stand density, Germany 2687
- stand development, wetlands, Croatia, simulation 4807
- stand structure, increment, Belgium, forest management 6941
- stems, water uptake, sap flow, measurement 4523
- stress factors, forest health, Netherlands 1296
- stumpage value, forest decline, Croatia 4459
- taxonomy
  - plant morphology, habit, Poland 2114-2115
  - Slovenia 8974
- thinning, Germany 9526
- tissue culture
  - micropropagation, explants, culture media 6054
  - shoots, development 3395
- transpiration, water deficit, Russia, meteorological factors 7064
- transplanting, Germany 4979
- underplanting, coniferous forests, Poland 3461
- understorey, natural regeneration, Germany, *Pinus sylvestris* 925
- ungulates, forest management, national parks, Poland 4058
- vegetation types, history, UK 510
- volume, increment, bark, Spain, equations 5961
- volume determination
  - remote sensing 1034

***Quercus robur** cont.*
- volume determination *cont.*
  - remote sensing *cont.*
    - Russia 8693
- water stress
  - drought resistance, France 2830
  - hydraulic resistance, measurement 4512
- wind damage, Netherlands 1062
- wood chemistry
  - ellagitannins, distribution 4663
  - heartwood, age, tannins 8090
  - heavy metals, air pollution, forest decline, Poland 7095
  - variation, height 9824
- wood properties
  - genetic variation, France 4595
  - wood anatomy, methodology, boring 2494

Quercus rotundifolia
- browse, Mediterranean Region, phenolic compounds, techniques 437
- foliage, trichomes, Southern Europe 6403
- taxonomy, fruits, morphology, Spain 1321
- water stress, plant physiology, Spain 1114

Quercus rubra
- agroforestry
  - afforestation, fields, France, research 7580
  - France 5882
- air pollution
  - deposition, USA, simulation 2871
  - ozone, plant physiology, age of trees 3648
- artificial regeneration, tree guards, USA 8625
- atmosphere, isoprenoids, emission, USA 8010
- bacterial diseases, *Xylella fastidiosa,* USA 8314
- bark
  - measurement 5952
  - thickness, fire resistance, USA 1197
- canopy, solar radiation, USA, defoliation 3725
- carbon dioxide enrichment
  - light, plant succession, USA 3099
  - plant physiology, France, drought 4473
- clear felling, natural regeneration, USA 147
- container grown plants, buds, dormancy, frost resistance, Canada 4477
- coppice
  - plant physiology 4687
    - USA 4686
- deciduous forests, gas exchange, USA, simulation 3328
- deer, *Odocoileus hemionus,* plant succession, USA 3093
- ectomycorrhizas, *Suillus luteus,* forest nurseries, USA 3149
- explants, necrosis, plant water relations, plant nutrition 6065
- fertilizers, nutrient deficiencies, air pollution, nitrogen, cycling, Netherlands 2617
- foliage
  - crown, light intensity, plant morphology, development 2014
  - optical properties 7032
  - ozone, plant physiology, seasonal variation 4703
  - plant water relations 6299
- forest influences, air pollution, methane, USA 5359
- forest litter
  - decomposition, USA 9703
  - soil fauna, USA 1924
- forest plantations
  - pseudogleys, increment, Slovenia 2695
  - weed control, herbicides, USA 172
- France, books 4153
- frost resistance, roots, Russia 279
- fungal diseases
  - *Ceratocystis fagacearum*
    - USA 1459
      - control 3170

***Quercus rubra** cont.*
- genetic variation, plant water relations, herbivores, resistance, USA 8810
- growth models, Germany 9595
- increment, height, understorey, USA 3963
- insect pests
  - *Lymantria dispar*
    - biological control, tannins 7508
    - Canada, biological control 677
    - defoliation 2328
    - feeding behaviour, site factors 2323
    - plant nutrition, USA, resistance 7446
    - resistance, genetic variation 8331
    - USA
      - biological control 9162
      - biology 645, 5733
      - resistance 2318
- insecticides, residues 7112
- light, soil water, increment, USA 5181
- linear plantations, water pollution, control, USA 9496
- micropropagation 5080
- mycorrhizas, *Pisolithus tinctorius,* plant growth regulators, planting stock 5594
- natural regeneration, understorey, canopy, USA 3118
- nitrogen cycle, air pollution, nitrogen retention, USA 326
- ozone, microclimate, plant physiology 1965
- photosynthesis, plant water relations, foliage, USA 1265
- plant growth regulators, USA, biomass, growth 3781
- plant nutrition, nitrogen, enzymes, seedling growth 5289
- plant succession, old fields, site requirements 3102
- planting, tree guards, USA 937
- planting stock
  - genetic variation, USA 5112
  - roots, USA, morphology, grading 6078
- pollen, immunoprecipitation tests, chemotaxonomy 423
- provenance trials, Korea Republic, growth, survival 7720
- seedling growth, Canada 8899
- seedlings
  - plant competition, North America, growth 3058
  - water stress, drought resistance 4520
  - waterlogging, water stress, photosynthesis, pot experimentation 4685
- shelterwood system, underplanting, weed control, Canada 9487
- soil chemistry, nitrogen, soil biology, USA 307
- soil texture, fine fraction, biomass production, USA 1091
- species trials, forest plantations, grazing, France 5884
- stem form, USA 8692
- street trees, tree injection, nutrients, soil air, UK 10143
- taxonomy, plant morphology, habit, Poland 2114-2115
- tree guards, USA, shoots, growth 3431
- volume determination
  - equations 8695
  - taper, estimation, USA 4382
- water stress
  - drought resistance, France 2830
  - genotype environment interaction, adaptation, USA 2206
  - hydraulic resistance, measurement 4512
- wildlife, *Microtus pennsylvanicus,* plant succession, USA 5811
- wood anatomy, tyloses, suberin 7160

Quercus rubramenta, taxonomy, botany, Mexico 1323

Quercus semecarpifolia
- foliage, India, tannins 1244
- forest litter, decomposition, India 8782
- forests, soil types, mollisols, ultisols, India 7052

***Quercus semecarpifolia** cont.*
- mistletoes, *Loranthus,* age of trees, India 617
- soil chemistry
  - humic acids, soil fertility, India 286
  - India 1902
- treelines, India 1356
- vegetation types
  - biomass production, stand characteristics, India 6540
  - cycling, India 6541

Quercus serrata
- acid deposition, stemflow, soil chemistry, Japan 7999
- coppice, forest fragmentation, biodiversity, Japan 8403
- crown, Japan, branches, development, morphology 9795
- foliage
  - India, tannins 1244
  - photosynthesis, Japan, measurement, techniques 3316
- forest litter, cycling, Japan, seasonal variation 7894
- forest plantations, natural regeneration, site factors, Japan 7772
- light, photosynthesis 9844
- mycorrhizas
  - *Hebeloma cylindrosporum,* morphology 6613
  - *Pisolithus tinctorius,* morphology 6613
- pollen, allergens, Japan 5046
- reclaimed land, marine sediments, Japan, stand development 6703
- reproductive behaviour, Japan 2096
- roadside plantations, forest influences, air pollution, Japan 7126
- seedlings, plant nutrition, enzymes, plant composition 6316
- stem form, snow, Japan, resistance 2954

Quercus shumardii
- shade trees, USA, evaluation 8457
- stand structure, stability, USA 550

Quercus spicata, wood anatomy 403

Quercus stellata
- control, woody weeds, herbicides, USA 1766
- dendrochronology, growth rings 9313
- forest fires, frequency, dendrochronology, USA 8029
- woodlands, birds, nesting, USA 6679

Quercus suber
- agroforestry, amenity forests, management, forest fires, France 5877
- biomass, cork, forest litter, increment, Spain 1825
- cork, yields, quality, Spain 7800
- dehesa grasslands, water balance, Spain 4077
- edible fungi, *Tuber,* Sardinia 207
- foliage, trichomes, Southern Europe 6403
- forest litter
  - decomposition
    - fauna, France 7930
    - forest influences, soil chemistry, Portugal 8026
- forest management, multiple use, forest economics, Portugal 9257
- grafting, Sardinia, techniques 6066
- insect pests, *Platypus cylindrus,* Portugal 7464
- mixed forests, forest management, soil fertility, Spain 1190
- natural regeneration, artificial regeneration, Spain, reviews 7775
- phenology, Portugal 5367
- shoot cuttings, roots 6891
- stomata, photosynthesis, transpiration, diurnal variation 456
- tissue culture
  - culture media, carbohydrates, rooting 5100
  - Italy, micropropagation 4293
  - somatic embryogenesis 8588

Quercus thomsoni, wood anatomy 403

Quercus toza (*see Quercus pyrenaica)*

Quercus trojana, fungal diseases, forest decline, drought resistance, Italy 8119

Quercus tuberculata, synecology, forest management, Mexico 4773

Quercus variabilis, species trials, exotics, arboreta, New Zealand 2545

Quercus velutina
- canopy, solar radiation, USA, defoliation 3725
- clear felling, natural regeneration, USA 147
- control, woody weeds, herbicides, USA 1766
- foliage
  - crown, light intensity, plant morphology, development 2014
  - optical properties 7032
- forest decline
  - dendrochronology, USA 9863
  - forest management, USA 6504
- forest influences, air pollution, methane, USA 5359
- nitrogen cycle, air pollution, nitrogen retention, USA 326
- pruning, profitability, USA 6363
- wood anatomy 2027

Quercus virginiana
- bacterial diseases, *Xylella fastidiosa,* USA 2288
- container grown plants, irrigation, USA 6756
- fungal diseases
  - *Ceratocystis fagacearum*
    - tree breeding, USA 1457
    - USA, control 4877
- gas exchange, seasonal variation, precipitation, USA 1263
- insect pests, *Stilbosis quadricustatella,* USA, resistance 7447
- irrigation, mined land, USA, reclamation 4091
- micropropagation 5080
- pollen, immunoprecipitation tests, chemotaxonomy 423
- water use
  - transpiration, USA 8804
  - USA 7059

Quercus wislizenii, insect pests, Curculionidae, USA 5745

Rabbits
- *Oryctolagus cuniculus*
  - *Acacia oswaldii,* natural regeneration, Australia 4928
  - forest plantations, Australia, control, books 6787

Rabdophaga, insect pests, *Salix exigua,* USA 7495

Radiography, *Pinus roxburghii,* seed testing, techniques 2488

Radionuclides
- control, protection forests, silviculture 3229
- fallout
  - caesium, *Pinus sylvestris,* canopy, Finland 1955
  - forest litter, pollution, Poland 5306
  - forest trees
    - age determination 1151
    - latitude 4547
  - *Pinus sylvestris,* increment, Ukraine 4548
  - soil pollution, Ukraine 5308
  - spread, Ukraine 6327
  - uptake, *Betula pendula,* Ukraine 1954
- *Pinus banksiana,* seed germination, Canada 2861
- *Pinus sylvestris,* fallout, soil pollution, Germany, movement in soil 8830
- strontium, seedlings, uptake, *Pinus,* mycorrhizas 4007
- uptake, edible fungi, soil types, Russia 7980

Rain forests (*see* Vegetation types, rain forests)
- selective felling, stand structure, Indonesia, logging effects 1738

Rainfall (*see* Precipitation)

Ramichloridium pini, fungal diseases, *Pinus contorta,* UK 2270

Randia taylorii, savanna woodlands, natural regeneration, farmland, Tanzania 3114

Range management, multipurpose trees, agroforestry, research, India 10114

Rangelands (*see also* Grazing)

Rangelands *cont.*
- *Artemisia frigida,* weed control, Canada 5145
- conifers, erosion 7554
- multipurpose trees, planting, soil types, Tunisia 8420
- *Quercus coccifera,* goats, Greece 9286
- *Quercus ilex,* dehesa grasslands, botanical composition, Spain 9924
- remote sensing
  - vegetation
    - change
      - Australia 7853
      - simulation 7853
- weed control, forest fires, grazing 7510
- woody weeds, weed control, physical control, USA 5147

Rangifer tarandus
- deer, clear felling, Canada, ecology 687
- *Pinus sylvestris,* natural regeneration, damage, fungal diseases, Finland 10061
- wildlife
  - *Abies lasiocarpa*
    - lichens
      - Canada 5809
      - USA 5809

Rapanea laetevirens, wood anatomy, rays 2024

Rapanea lorentziana, wood anatomy, rays 2024

Rattans (*see* Canes and rattans)

Rattus norvegicus, damage, rodents, *Nothofagus,* natural regeneration, New Zealand 4756

Ratufa indica, squirrels, *Ficus,* India, food plants 1514

Ratufa macroura, squirrels, nature reserves, riparian forests, India 695

Rauvolfia tetraphylla, phenology, flowering, fruiting, Venezuela 5368

Rauvolfia vomitoria, browse plants, insect pests, Nigeria 8325

Ravenala madagascariensis, exotics, reproductive behaviour, Australia, plant colonization 1306

Ravenea
- taxonomy
  - Comoros 8963
  - Madagascar 8963

Ravenelia sessilis, fungal diseases, *Albizia chinensis,* forest nurseries, India 605

Reaction wood
- broadleaves, fibres, growth stress 4585
- *Eucalyptus,* wood anatomy, wood chemistry, lignin 5375
- forest trees, measurement, morphology, development 4584
- *Fraxinus mandshurica,* wood anatomy, fibres, cell walls 6412
- growth stress, simulation 4590
- *Larix decidua,* wood anatomy 2016
- *Pinus sylvestris*
  - plant growth regulators, IAA 4659
  - wood anatomy 2016
- *Populus* 'I-214', growth effects, France, wood defects 4586

Recchia mexicana, seedling growth, plant nutrition, nutrient availability 6309

Reclaimed land
- broadleaves
  - afforestation
    - mined land, USA 9539
    - Singapore 4095
- marine sediments, broadleaves, Japan, stand development 6703

Reclamation
- *Acacia,* species trials, mined land, Peninsular Malaysia 3240
- *Acacia auriculiformis,* mine spoil, lateritic soils, India 10092
- *Acacia gerrardii,* fly ash, Zimbabwe 7564
- *Acacia greggii,* planting stock, protection, USA 6712
- *Acacia mangium,* mined land, species trials, agroforestry, Peninsular Malaysia 3241
- afforestation
  - agroforestry, Vietnam 6709

Reclamation *cont.*
- afforestation *cont.*
  - marginal land, silviculture, India, books 4
  - mined land, New Caledonia 9252
  - mixtures, degraded land, Australia 3233
  - Niger, techniques 5852
  - peatlands, Poland 714
  - plant succession, deforestation, Amazonia 7557
  - polders, Netherlands 1537
  - saline soils, India, techniques 8387
  - shelterbelts, agroforestry, research, Russia, books 2455
- agroforestry, waste land, India, conferences 767
- *Albizia procera,* mine spoil, fertilizers, India 9250
- *Albizia zygia,* degraded forests, natural regeneration, Ghana 8390
- *Alnus cordata,* mine spoil, Italy, symbiosis 2406
- *Alphitonia petriei,* direct sowing, Australia 8395
- *Atriplex semibaccata,* saline soils, mined land, South Africa 8391
- bottomland forests, water management, UK 10081
- broadleaves
  - degraded forests, Albania 6707
  - landfills
    - species trials
      - plant nutrition, UK 4948
      - UK 4947
  - mine spoil, UK, soil amendments 6708
  - mined land
    - tillage, USA 4093
    - USA, establishment 4090
  - species trials, mined land, Venezuela 6711
- common lands, development projects, afforestation, India 7559
- community forestry, choice of species, waste land, India 4123
- conifers, Russia 3228
- degraded forests
  - development projects, India 9243
  - South East Asia, techniques, reviews 3238
  - species trials, plant succession, India 6704
  - tropical forests
    - Asia, conferences 2479, 3232, 3245
    - Oceania, conferences 2479, 3232, 3245
- degraded land
  - afforestation, Vietnam 3244
  - agroforestry, Vietnam 3244
  - India, ecology, sociology 3236
- desert soils, multipurpose trees, species trials, Egypt 3372
- development projects, Mauritania 8535
- *Eremophila,* seed germination, Australia 4264
- eroded soils
  - China 3235
  - multipurpose trees, community forestry, choice of species, Indonesia 3237
  - site class assessment, choice of species, India 6705
- *Eucalyptus,* saline soils, Australia 711
- *Eucalyptus globulus,* forest plantations, saline soils, Australia 9246
- *Eucalyptus marginata,* mined land, understorey, Australia 1542
- exotics, mined land, Venezuela 6711
- fly ash, multipurpose trees, species trials, India 9248
- forest trees
  - mycorrhizas, mined land, Australia 5590
  - species trials, saline soils, Australia 7715
- forests, coastal areas, South Africa, monkeys, seed dispersal 3211
- grasslands, bamboos, *Bambusa blumeana,* Philippines 8394

Reclamation *cont.*
- landfills, classification, UK 6710
- *Leucaena,* species trials, mined land, Peninsular Malaysia 3240
- *Madhuca longifolia*
  - waste land
    - irrigation, India 1539
    - planting, India 1539
- mangrove forests, India 9251
- mine spoil
  - soil conservation, water conservation, India 713
  - Zimbabwe 7563
- mined land
  - national parks, Christmas Island, birds, conservation 3234
  - Peninsular Malaysia 3239
  - plant succession, USA, botanical composition 4094
  - USA 3231
- multipurpose trees
  - agroforestry, development projects, degraded forests, Thailand 3242
  - degraded forests
    - development, Indonesia 7560
    - India 9249
  - forest plantations, degraded land, Philippines 8624
  - mined land
    - India, economics 3248
    - species trials, India 3246
    - Thailand 3243
  - seeds, storage, seed germination, India 79
  - species trials
    - mine spoil, India 2404, 4949
    - mined land, Cuba 1540
    - saline soils, Pakistan 6014
    - sodic soils, India 712
  - waste land, soil water, infiltration, India 8397
- mycorrhizas, *Paxillus involutus, Betula pendula,* UK 4096
- *Paraserianthes falcataria,* mined land, species trials, agroforestry, Peninsular Malaysia 3241
- *Pinus pinaster,* afforestation, France, history 2407
- planning, degraded forests, India 8388
- polluted soils, landscape, Italy 3247
- *Prosopis juliflora,* saline soils, agroforestry, India 8389
- *Quercus alba,* planting stock, mine spoil, USA 5849
- riparian forests, forest economics, USA, simulation 5850
- saline soils, farm forestry, development projects, Australia 7566
- *Salix alaxensis,* mined land, USA 3230
- seedbeds, site factors, predators, *Eucalyptus marginata,* Australia 3441
- shelterbelts
  - soil organic matter, Russia 5853
  - steppe soils, Russia 5854
- simulation, logging, smallwood 1541
- soil conservation, water conservation, China 10082
- soil types, farm forestry, agroforestry, Australia, wetlands 8410
- species trials
  - bauxite residues, Australia 67
  - polluted soils, oilfields, Russia 4950
- stony soils, mountain areas, *Picea abies,* Poland 3440
- techniques, degraded land, India 6706
- waste land
  - agroforestry, farm forestry, fuel plantations, India 7558
  - forestry development, participation, India 4092
  - multipurpose trees, agroforestry, India, books 6773
  - sodic soils, research, India 8392
- watershed management, soil conservation, water conservation, India 2395
- wildlife, birds, riparian forests, USA 4921
- woody plants, afforestation, mined land, species trials, New Caledonia 9247

Recreation (*see* Amenity and recreation areas; Forest recreation)

Recruitment
- *Brosimum alicastrum*, synecology, species diversity, seed predation, Mexico 1406
- forest trees, simulation, USA, spatial distribution 4206
- *Manilkara bidentata,* wind damage, stand structure, Puerto Rico 1076
- *Quercus,* USA 3112
- rain forests, forest trees, seed size, Chile 7258
- stand characteristics, seed dispersal 9022
- *Vouacapoua americana,* seed dispersal, soil water regimes, French Guiana 6571

Reflectance, *Pinus ponderosa,* remote sensing, radiometry, USA 4452

Refugees, forest resources, deforestation, Malawi 6720

Refuse tips, legislation, Germany, European Union 9401

Regelia ciliata, seed germination, temperature 76

Regeneration (*see* Artificial regeneration; Natural regeneration)

Regeneration surveys
- conifers, Canada, techniques 248
- *Pinus sylvestris,* Finland 7777
- remote sensing, aerial photography, Canada 258

Rehabilitation
- agroforestry, development, land use, conflict, Venezuela 6727
- deforestation, degraded forests, Indonesia 8415
- degraded forests
  - tropical forests
    - Asia, conferences 2479
    - Oceania, conferences 2479
- forest trees, species trials, Canary Islands 6032
- species trials, water harvesting, savanna woodlands, Kenya 6120
- watersheds, choice of species, planning, Indonesia 6700

Reinforcement planting (*see* Beating up)

Relascopes (*see also* Angle count)
- sample plot technique, Italy 4440

Relief
- landscape ecology, Germany 7042
- stand age, classification, remote sensing, radar, Germany 3515

Remote sensing
- *Acer saccharum,* foliage, damage 4034
- aerial photography
  - conifers, stand density, Japan 9637
  - deciduous forests, canopy, structure, Japan 6221
  - densitometry, analysis 8741
  - fungal diseases, *Cryphonectria parasitica, Castanea sativa,* Switzerland 7854
  - infrared photography, *Quercus pubescens,* Italy, forest health 6232
  - rain forests, deforestation, Zimbabwe 7002
  - regeneration surveys, Canada 258
- boreal forests
  - Finland 7007
  - insect pests, spatial distribution, Finland 7839
- broadleaves, plant physiology 1038
- canopy, USA, estimation 6240
- chaparral, forest fires, fire danger, USA 2913
- colour photography, *Pinus radiata,* nutrient deficiencies 7664
- coniferous forests
  - Canada, statistical analysis 2753
  - leaf area index, USA 1342
  - mortality, USA 4445-4446
  - plant composition, USA 1045, 1344
  - stand characteristics, USA 1345
  - synecology
    - simulation, USA 1338, 1347
    - USA, soil properties 1382
- conifers, diameter, Norway 9629
- data processing, vegetation 5206
- deciduous forests, silvicultural conversion, planning, Netherlands 150

Remote sensing *cont.*
- deforestation, Costa Rica 718
- evapotranspiration, fire danger, France 244
- *Fagus sylvatica,* forest inventories, volume determination, Austria 6216
- foliage, reflectance 1857
- forest ecology, stand structure, mathematics 1411
- forest fires, expert systems 8512
- forest fragmentation, USA 6998
- forest inventories
  - Australia, economic evaluation 6999
  - broadleaved evergreen forests, Chile 2751
  - geographical information systems, Belgium, stand characteristics 259
  - increment, Sweden 7008
- forest management, multiple use, conferences 6809
- forest resources
  - deforestation, surveys, India 1551
  - Madagascar 3524
- forest trees
  - biomass production 2705
  - canopy, USA, reflectance, computer techniques 3525
  - foliage
    - optical properties 1256
    - reflectance, stress 2769
  - yield forecasting, simulation, Estonia 1866
- *Fraxinus pennsylvanica,* canopy, atmosphere, energy relations, USA 1028
- geographical information systems
  - coniferous forests, Japan, geographical distribution 9931
  - deciduous forests, Japan, geographical distribution 9931
  - forest management, USA, books 6774
- geology, vegetation types, Canada 260
- global positioning systems
  - surveying
    - Canada, testing 7000
    - Italy 8740, 9636
- image interpretation
  - forest inventories, Canada 243
  - forest management, Slovenia 5201
  - forests
    - classification, UK 2760
    - shifting cultivation, India 2757
  - land use, UK 4447
  - protection forests, stand development, Austria 245
  - soil types, leptosols, stand characteristics, Sweden 5205
  - vegetation types, Russia 4454
- image processing
  - broadleaves, vegetation types, Australia 2763
  - rain forests
    - Brazil 2767
    - Mexico 2766
    - Peru 2765
  - tropical forests 2768
- imagery, forest management, planning, geographical information systems 1016
- infrared photography
  - forest inventories, forest health, Switzerland 4438
  - mensuration, Croatia 4453
- land use
  - change, statistical analysis 261
  - deforestation, Thailand 7852
  - Italy, geographical information systems 8734
  - Netherlands 5207-5208
  - plant succession, Sweden 8404
  - urban areas, USA 6239
  - USSR 5209
- Landsat
  - deciduous forests, synecology, India 9638
  - mapping, stand characteristics, USA 4444
  - national parks, land use, Spain 6751
  - thematic mapper, deforestation, Peninsular Malaysia 8738

Remote sensing *cont.*
- landscape ecology, tropical forests, Guatemala 6997
- lasers, topography 9641
- mangrove forests, synecology, India 6996
- mapping
  - Landsat, fire danger, classification, Canada 8731
  - statistical analysis, USA 3521
- marsupials, *Trichosurus vulpecula,* forest trees, New Zealand, damage 471
- mountain areas, landscape, Italy, methodology 6715
- multispectral imagery
  - coniferous forests, simulation, USA 1853
  - forest inventories, Spain 6228
  - *Kalmia angustifolia,* detection, Canada 3512
  - land use
    - change, Brazil 7843
    - Spain 1863
  - mixed forests, USA, biochemistry, plant water relations 8737
  - stand structure, Canada, simulation 8739
  - thematic mapper, forest management, USA 8733
  - vegetation
    - land use
      - change
        - Brazil 9630
        - Mali 9630
        - USA 9630
    - reflectance, climate, Australia 1867
    - woody plants, maps, Zimbabwe 7846
  - vegetation types
    - Australia 6222
    - Japan, reflectance, estimation 9633
- photogrammetry, volume determination, Germany, statistical analysis 1034
- photointerpretation, conifers, thinning, stand structure, equations 8655
- *Picea,* stand characteristics, simulation, USA 2754
- *Picea mariana,* degraded forests, natural regeneration, Canada 7838
- *Pinus albicaulis,* forest decline, USA 470
- *Pinus halepensis,* forest fires, Spain 3696
- *Pinus pinaster,* canopy, chemistry, France 6226
- *Pinus ponderosa,* understorey, USA 1343
- *Pinus radiata,* forest plantations, erosion, hurricanes, New Zealand 5200
- plant physiology, equipment 1037
- *Quercus,* landscape, France 3508
- *Quercus pubescens,* plant physiology 1036
- *Quercus robur,* volume determination, Russia 8693
- radar
  - backscatter, forests, simulation 7677
  - biomass
    - Germany 3517
    - USA 1031
  - boreal forests, USA, seasonal variation 2755
  - coniferous forests
    - biomass, simulation, USA 1042
    - stand characteristics, simulation, USA 1039
  - data processing, vegetation types, USA 1041
  - *Fagus sylvatica,* Switzerland, temperature 1862
  - forest resources 6238
  - *Fraxinus excelsior,* volume determination, Netherlands 3518
  - integration, forestry, infrared imagery, reviews 6241
  - land use, Belize 1864
  - *Pinus nigra,* volume determination, UK, statistical analysis 3519
  - *Pinus pinaster*
    - biomass, stand characteristics, France 3516
    - France, methodology 3514
    - stand structure, France 3520

Remote sensing *cont.*
- radar *cont.*
  - *Pinus resinosa,* USA, site factors 1040
  - *Pinus sylvestris,* biomass, Finland 3517
  - *Pinus taeda*
    - biomass
      - USA 6227
        - soil water 1858
  - plant physiology, canopy, Brazil 1032
  - *Populus,* volume determination, Netherlands 3518
  - simulation 4442
  - stand age, classification, relief, Germany 3515
  - stand characteristics, simulation 9635
  - theory, vegetation 3520
  - tropical forests, land use, forest resources 262
  - understorey, stand structure, techniques 7009
  - USA, climatic factors 1030
  - vegetation types, seasonal behaviour, USA 1029
- radiometry
  - boreal forests, forest fires, USA 5202
  - forest fires, mapping, USA 4450
  - land use
    - Canada 1861
    - mapping 7010
  - mapping, USA 3510
  - *Pinus ponderosa,* reflectance, USA 4452
  - reflectance, *Carya illinoinensis,* USA 7842
  - tropical forests, Africa, mapping 6230
  - vegetation types 2764
- rain forests
  - deforestation
    - Argentina 5861
    - Australia 9261
- reflectance
  - coniferous forests
    - Sweden, solar radiation 1859
    - USA 1046
  - deserts, Ethiopia 1868
  - forests, Ethiopia 1868
  - *Pinus elliottii,* canopy, foliage, USA 8732
  - variation, *Pinus sylvestris,* Scandinavia 7845
  - vegetation types, USA 1854
- satellites
  - biomass production, vegetation types, simulation 3509
  - boreal forests, forest inventories, Sweden 7006
  - climate, vegetation, conferences 4178
  - forest inventories
    - books 6768
    - France, methodology, testing 4449
    - valuation, Sweden 5216
  - global positioning systems 6236
  - image interpretation, vegetation, Australia 7844
  - land use
    - classification, databases, New Zealand 8400
    - India 3513
  - mountains, surveying 6231
  - *Pinus taeda,* biomass, USA 2762
  - radiometry, forest fires, Australia 7848
  - reflectance, canopy, Luxembourg 1033
  - stand characteristics, biomass, India 2761
  - vegetation
    - phenology, Africa, simulation 9631
    - USA, spectral analysis 1043
  - vegetation types
    - classification, statistical analysis 1035
    - drought, USA 7851
- savannas, biomass, Mali 3922
- simulation, data banks 33
- stand characteristics, forest ownership, classification, USA 6223

Remote sensing *cont.*
- stand structure, photosynthesis, vegetation types, USA 5199
- statistical analysis, vegetation types, Australia 1856
- thematic mapper
  - air pollution, damage, Europe 6233
  - boreal forests, Sweden 6229
  - canopy gaps, wind damage, Brazil 3566
  - conifers, virgin forests, USA 1865
  - damage, *Picea abies,* forest decline, Czech Republic 7840
  - image processing, forest fires, Spain 7847
  - *Juniperus,* woodlands, erosion, USA 709
  - *Kalmia angustifolia,* detection, Canada 3512
  - land use, statistical analysis 7841
  - mixed forests, forest management, USA 7005
  - *Picea abies,* forest decline, stand characteristics, Sweden 1855
  - *Pinus edulis,* woodlands, erosion, USA 709
  - rain forests, classification, Peru 3511
  - stand characteristics, topography, Korea Republic 8742
  - volume determination, Canada, coniferous forests 5203
- thinning, Sweden, reflectance 4443
- tropical forests
  - canopy, Ghana 9642
  - classification, Brazil 6225
  - deforestation, natural regeneration, carbon dioxide 1047
  - land use, area, estimation 9634
- vegetation
  - change
    - rangelands
      - Australia 7853
      - simulation 7853
  - classification 7012
    - USA 7011
- vegetation types
  - biomass production, climate, USA 2691
  - Canada, statistical analysis, classification 2752
  - simulation, UK 7850
  - USA, spectrometers 1044
  - USSR 5209
- video cameras
  - bottomland forests, USA, forest trees, identification 9643
  - *Pinus ponderosa,* understorey, USA 5204
- video imagery
  - New Zealand 7837
  - USA 6237
- video recordings, vegetation types, Brazil 1860
- woodlands, Australia 3526

Repellents, *Picea glauca,* browsing damage, Canada, selenium 4905

Reports
- forest statistics, Canada 8476
- forestry, development projects, international cooperation, Thailand 760
- international organizations, CIFOR, Indonesia 759
- research institutes, South Africa 2456

Reproductive behaviour
- *Abies pinsapo,* pollen, viability, dispersal, Spain 489
- *Acacia tortilis,* Senegal 3842
- *Acer rufinerve,* Japan, sex expression 6508
- *Alnus rubra,* irrigation, spacing, fertilizers, USA 9869
- *Arbutus unedo,* climate, Italy 3838
- *Banksia brownii,* population genetics, endangered species, Australia 3825
- *Banksia menziesii,* habit, plant water relations, Australia 3032
- *Bertholletia excelsa* 2106
- *Betula papyrifera,* acid deposition, Canada 3659
- *Brachylaena huillensis,* phenology, Kenya 3833

Reproductive behaviour *cont.*
- broadleaves, phenology, abscission, India 388
- canes and rattans
  - *Calamus,* species diversity, Sabah 2013
  - *Korthalsia furtadoana,* species diversity, Sabah 2013
- *Carpinus,* seeds, seedlings, Japan, old-growth forests 7211
- *Castanopsis cuspidata,* production 9885
- *Chlorophora,* plant morphology, Ghana 5420
- forest trees
  - biology, control, conferences 9327
  - Canada 478
  - crown, forest decline, UK 3033
  - theory, evolution 3827
- *Fraxinus nigra,* floodplains, Canada 3834
- inbreeding, *Shorea megistophylla,* selective felling, Sri Lanka 5425
- incompatibility, *Cordia alliodora,* flowers, morphology, variation 8123
- *Libocedrus chilensis,* plant morphology, Argentina 2104
- life form, vegetation types, Venezuela 1308
- *Lindera umbellata,* Japan, sexual dimorphism 8950
- *Magnolia schiedeana,* Mexico 2094
- mangroves, *Avicennia marina,* seed dispersal, Australia 3041
- mating systems, *Cordia alliodora,* population genetics, Costa Rica 6598
- *Mikania cordata,* habit 5369
- Myrtaceae
  - Brazil 3027
  - genetics, ploidy, natural selection 578
- *Phillyrea angustifolia,* sex, Spain, insect pests, *Schizomyia phillyreae* 4735
- *Picea abies*
  - seed orchards
    - climatic factors, cold resistance, Norway 9878
    - root pruning, plant growth regulators, Sweden 3828
- *Picea sitchensis,* seed orchards, Canada, estimation 4266
- *Podocarpus,* fruits, South Africa 3836
- *Prosopis,* flowers, morphology 2051
- Proteaceae 2101
  - fynbos, South Africa 1305
- *Quercus,* seed production, USA, variation 4733
- *Quercus serrata,* Japan 2096
- *Ravenala madagascariensis,* exotics, Australia, plant colonization 1306
- *Rhamnus frangula,* Spain 4728
- *Salix alaxensis,* shoots, buds 8122
- *Salix rubens,* plant colonization, USA 3947
- *Saurauia,* pollen 1316
- sclerophyllous forests, habit, Chile 3839
- seed production, reviews 9429
- self compatibility, inflorescences, *Coriaria* 8957
- *Sophora japonica* 2111
- *Tectona grandis,* India 7210
- tropical forests, phenology, India 2102

Reptiles, *Oedura reticulata, Eucalyptus,* Australia, fragmentation 7531

Republic of Georgia, short rotation forestry, species trials 2546

Research
- *Acacia,* biology, utilization, multipurpose trees, Tropics 185
- acid deposition, Norway 754
- agroforestry 10095
  - Asia, conferences 2477
  - development, policy, land use 10096
- air pollution, damage, methodology 1964
- allelopathy, Slovakia 7320
- bacterial diseases, *Xanthomonas populi, Populus,* Belgium 611
- bamboos, Indonesia, conferences 2480
- bibliographies, Australia 7707
- biomass, for energy, Canada, bibliographies 8478
- broadleaves, forest plantations, Australia 3353

Research *cont.*
  carbon cycle, forest management, climatic change, carbon dioxide enrichment, reviews 4533
  controlled burning, USA, history 2532
  environment, nature reserves, Germany 5994
  ergonomics, South Africa 4249
  Erythrina, agroforestry, botany, nitrogen fixation, conferences 3309
  Eucalyptus, silviculture, forest plantations, Australia 4364
  experimental design, statistics 8504
  forest ecology
    air pollution, techniques 6354
    Germany 9405
  forest fires, USA, history 2532
  forest health, Switzerland 1302
  forest influences, hydrology, erosion, Thailand 358
  forest management
    private forestry, USA 1642
    sustainability, conferences 7640
  forest recreation, USA, conferences 2468
  forest resources, USA, bibliographies 763
  forest trees
    history, Zimbabwe 6861
    tissue culture, Germany 7735
    vegetative propagation, India 93
  forestry 3356
    application, constraints, conferences 6805
    Arid Regions, Kenya, reviews 6000
    Australia 3355
    Canada 52
    education, India, conferences, books 7624
    genetic resources, Mediterranean Region 3970
    international organizations
      CGIAR 6005
      CIFOR 6005
      ICRAF 6005
    Malaysia, conferences 777
    Mali 8532
    Mediterranean Region, international organizations 3342
    organizations, Poland, bibliographies 6792
    Poland, bibliographies 761
    sustainability 5996
      organizations, India 5044
    Zimbabwe, conferences 775
  forestry machinery, design, environmental degradation, environmental protection 9553
  forests, plant genetic resources, biodiversity 39
  fuel plantations, irrigated stands, environmental protection, development projects, Kenya 6001
  fungal diseases, *Melampsora, Populus*, Belgium 611
  growth models 9367
  insect pests, *Dendrolimus, Pinus*, China, pest management 2335
  management
    forestry
      Asia, conferences 2481
      Oceania, conferences 2481
  multipurpose trees
    agroforestry, range management, India 10114
    choice of species, selection criteria, tree breeding, West Africa 8186
  nature reserves, history, Germany 9303
  networks, canes and rattans, periodicals 6767
  organizations, South Africa 7708
  Picea abies
    Europe 8492
    soil pH, Germany 9697
  Pinus, Canada 4247
  Pinus caribaea, forest plantations, Caribbean 953
  Pinus sylvestris, resin tapping, wood properties, quality, Poland 1984
  reclamation
    afforestation, shelterbelts, agroforestry, Russia, books 2455
    waste land, sodic soils, India 8392

Research *cont.*
  requirements
    agroforestry 5885
    forest management, participation, community forestry, India 3357
  secondary forests, forest management, growth models, Australia 6833
  selection system, Switzerland 38
  tropical forests
    conservation, Ecuador 9301
    rain forests 2144
  virgin forests, Switzerland 38
  wildlife, forest management 4910
Research institutes
  forest trees, seeds, biodiversity, conservation, Australia 8549
  reports, South Africa 2456
Research projects
  agroforestry, technology transfer, USA 9272
  boreal forests, climatic change, carbon cycle, Canada 9943
  forestry
    Namibia, development plans 5038
    Rwanda, conferences 9323
Reserved forests
  history, nature conservation, sociology, Guinea 1634
  insect pests
    Ips typographus
      Sweden
        incidence 10044
        predators 10044
  Mali, USA, government organizations 8516
  tropical forests, Zimbabwe, bibliographies 7635
  woody plants, nomenclature, uses, ethnobotany, Tanzania 964
Reservoirs, *Cupressus macrocarpa*, forest litter, water pollution, Australia 5352
Resin tapping
  Agathis
    copal, production, Indonesia 969
    Indonesia 196
  economics 5163
  Pinus
    China 5163
    stand structure, genetic variation, Russia 197
  Pinus sylvestris
    sap flow, Germany 7067
    wood properties, quality, research, Poland 1984
  scars, microbial flora, fungi, *Pinus sylvestris*, Poland 1441
  techniques 5163
    Pinus merkusii, Indonesia 968
***Resinicium bicolor*,** decay fungi, forest litter, biology 9715
Resins
  conifers, defence mechanisms, abietic acid, biosynthesis 8114
  Pinus heldreichii, chemistry 8088
  yields, *Pinus sylvestris*, early selection 8200
Resource management, community forestry, forest management, Tropics, bibliographies 6795
Resources (*see* Energy resources; Forest resources; Forest statistics; Fuelwood)
Respiration
  Acer pseudoplatanus, cell culture, nutrient deficiencies, iron 461
  boreal forests, photosynthesis, Canada 8924
  broadleaves, Costa Rica 8929
  Chamaecyparis obtusa, biomass, increment, Japan 8707
  Chlorophora excelsa, seedlings, light 3010
  conifers
    forest litter, USA 4496
    USA 5412
  dark, forest trees, foliage, nitrogen, simulation 8102
  Fagus sylvatica, roots, Germany 7185
  forest trees, forest influences, carbon dioxide, Japan 7025
  Heteromeles arbutifolia, foliage, light, dark, habit 6474

Respiration *cont.*
  Lepechinia fragrans, foliage, light, dark, habit 6474
  measurement, equipment 5958
  photosynthesis, carbon dioxide 2998
  Picea rubens
    climatic factors, USA 8934
    heat tolerance, USA, geographical distribution 4478
  Pinus contorta, carbon cycle, stand development, USA 2851
  Pinus resinosa, growth models 4208
  Pinus sylvestris, seedlings, phenolic compounds, phytotoxicity, metal ions 7189
  Pinus taeda, transpiration, carbon dioxide, measurement 1272
  plant parasitic nematodes, *Bursaphelenchus xylophilus, Pinus densiflora*, stems 4895
  Prosopis juliflora, shoot cuttings, rooting, measurement 880
  Quercus alba, stems, carbon dioxide enrichment 6475
  seasonal variation, *Chamaecyparis obtusa*, Japan 1271
  Sequoia sempervirens, increment 3014
  Sequoiadendron giganteum, ozone, USA 2068
  simulation, *Pinus taeda* 3331
  Trema guineensis, seedlings, light 3010
***Retithrips syriacus*,** insect pests, *Eucalyptus globulus*, plant physiology 628
Retrophyllum
  foliage
    morphology
      palaeobotany
        taxonomy
          Australia 497
          New Zealand 497
Réunion
  Acacia, genetics 4840
  Casuarina cunninghamiana, stems, nodulation, nitrogen fixation 2238
  forest plantations, wind damage, hurricanes 9674
  insect pests, *Heteropsylla cubana, Leucaena*, surveys, methodology 9139
Reviews
  Acer pseudoplatanus, choice of species, nature conservation, UK 10125
  agroforestry 9280
    history, Mexico 4111
    Nepal 9285
    shifting cultivation, carbon cycle, soil organic matter, Tropics 8427
    Temperate Zones 5867
  air pollution, ozone 9754
  allelopathy, agroforestry 7319
  antifungal plants 203
  antioxidants, light, stress 466
  Azadirachta indica, insecticidal properties, plant extracts 4375
  bamboos
    Brazil 7223
    ethnobotany, Latin America 9562
  Betula
    air pollution, tolerance 1149
    soil pollution, tolerance 1149
  biofertilizers, microorganisms 5591
  birds
    cavities in trees, forest management 1526
    seed dispersal 1307
  broadleaves, flowers, development 2050
  Camptotheca acuminata
    medicinal plants
      China 7618
      USA 7618
  carbon cycle, forest management, climatic change, carbon dioxide enrichment, research 4533
  Castanea sativa, Switzerland 184
  cones, insects, interactions 5677
  conifers
    air pollution
      plant physiology, field experimentation, growth chambers 5956
      sulfur dioxide, photosynthesis 1957

Reviews *cont.*
- conifers *cont.*
  - cones, development 2050
  - flowers, development 2050
  - forest decline, air pollution, ozone 7984
  - shoot cuttings 96
  - somatic embryogenesis, biochemistry 4287
- controlled burning, fire ecology, forest management, Australia 3697
- *Cunninghamia lanceolata,* China 2926
- deer, *Alces alces,* browsing, ecology 7523
- ethnobotany, India 6697
- *Eucalyptus,* allelopathy, agroforestry 7318
- Fabaceae
  - India 7143
  - nitrogen fixation, root nodules, Tropics 6320
- *Fagus sylvatica,* genetic variation, Germany 6582
- forest decline
  - air pollution, organic compounds 8004
  - World 5418
- forest ecology, climatic change, simulation 1960
- forest health, monitoring, methodology 6812
- forest influences, carbon dioxide enrichment, energy resources 7130
- forest management
  - biodiversity, nature conservation, Mediterranean Region 8438
  - sustainability, land use, Sahel 7830
- forest nurseries, growing media, container grown plants 9472
- forest plantations
  - forest influences, soil properties 1185
  - tree breeding, genetic diversity 8184
- forest trees
  - air pollution
    - Arid Regions 1968
    - control, India 3668
    - experimental design, growth chambers 5957
  - biology, agriculture, silviculture, Tropics 9372
  - branching, patterns, theory 8044
  - flowering, induction, Tropics 8955
  - genetic engineering, male sterility 7337
  - genetic markers 9028
  - nutrient deficiencies, magnesium 9732
  - photosynthesis, photoinhibition 5415
  - plant nutrition 5300
  - pollination, genetic diversity, air pollution, climatic change 5424
  - population genetics 2175
  - roots, dynamics, cycling 406
  - seedlings, frost injury, frost heave 4482
  - silviculture, genotypes, wood properties 8008
  - vegetative propagation
    - India 93, 97
    - tree breeding, economics 94
- forestry
  - Arid Regions, research, Kenya 6000
  - fertilizers, Netherlands 889
  - mechanization 2664
  - remote sensing, radar, integration, infrared imagery 6241
  - sustainability, Arid Regions 7689
  - World 9369
- forestry machinery 2666
- forests
  - soil
    - nitrogen cycle
      - air pollution 1953
      - global warming 1953
- fungal diseases
  - *Botryodiplodia theobromae,* conifers, seeds 603
  - *Discula destructiva, Cornus* 7406
  - *Phytophthora*
    - *Eucalyptus,* South Africa 1452
    - *Pinus,* South Africa 1452

Reviews *cont.*
- fungal diseases *cont.*
  - *Pythium*
    - *Eucalyptus,* South Africa 1452
    - *Pinus,* South Africa 1452
- genetic diversity, forestry practices 7334
- genetic transformation 4812
- genetic variation, environment, stress factors, Europe 6583
- insect pests
  - biological control, integrated pest management 7502
  - forest trees, New Zealand, biological control 679
  - India, damage, control 6646
  - *Ips grandicollis, Pinus,* Australia 8337
  - *Lymantria dispar,* biological control, by *Bacillus thuringiensis,* USA 5793
  - natural enemies, biological control, agroforestry, shelterbelts 9189
  - population dynamics, climatic change 2307
- light, measurement 1611
- mangroves, palaeobotany, America 6528
- mistletoes, *Dendrophthoe falcata,* host plants 618
- mountain forests
  - soil types
    - forest management
      - Czech Republic 45
      - Slovakia 45
- multipurpose trees, choice of species, Asia 1656
- mycoplasmal diseases, *Fraxinus* 7408
- Myoporaceae, plant composition, secondary metabolites 3753
- *Nothofagus pumilio,* silviculture, mensuration, synecology, Chile 955
- palaeoecology, USSR 6530
- peatlands, silviculture 8469
- *Picea abies*
  - defoliation 469
  - forest damage, diagnosis, biochemistry, Germany 6503
  - genetic variation, Germany 6582
  - provenance, frost resistance, foliage, air pollution 9679
- *Pinus,* exotics, species trials, minor forest products, India 6870
- *Pinus taeda,* tree breeding, tissue culture 7737
- *Populus tremula,* choice of species, silviculture, utilization, UK 9546
- *Quercus,* forest decline, diseases, Europe 4720
- *Quercus suber,* natural regeneration, artificial regeneration, Spain 7775
- rain forests, natural regeneration, species diversity, Tropics 7326
- roots, morphology, plant nutrition 8890
- selection system, Europe 912
- shifting cultivation, sustainability 7574
- silviculture, forest ecology 4323
- soil biology, air pollution, carbon dioxide enrichment 6295
- soil chemistry, plant nutrition, aluminium, calcium 6315
- soil formation, forest soils, Russia 5258
- *Sophora japonica,* bark, chemistry, lectins 1248
- *Taxus,* medicinal plants, taxol 208
- *Taxus baccata*
  - botany, genetic resources, ornamental woody plants 1202
  - Germany 9778
- *Tectona grandis,* vegetative propagation, India 100
- tree breeding
  - biotechnology, Developing Countries 5474
  - ideotypes 9027
  - wood anatomy, cell walls 3985
- tropical forests
  - cycling 4537
    - periodicity 4532
  - growth models 5017
  - treelines, Ethiopia 3917
- *Ulmus,* tree breeding, disease resistance, *Ophiostoma ulmi* 5565

Reviews *cont.*
- vegetative propagation, rooting 3403
- weeds, forest trees, New Zealand, biological control 679
- wildlife
  - forest ecology, logging effects, nature conservation, Australia 4129
  - seed dispersal, tropical forests 3868
- wood anatomy
  - cell walls 4656
  - rays, differentiation 6413
- woodlands, nature conservation, UK 10124
- woody plants
  - allelopathy 8174
  - carbon dioxide enrichment, plant physiology 2800

Rhabdomys pumilio, rodents, *Pinus patula,* South Africa, forest plantations, control 1516

Rhagoletis pomonella, insect pests, *Crataegus,* USA, parasitoids 5771

Rhamnus alaternus, seed dispersal, Formicidae, Italy 3830

Rhamnus cathartica, viral diseases, Germany 8318

Rhamnus frangula
- reproductive behaviour, Spain 4728
- wildlife, *Alces alces,* browse, forests, Poland 7534

Rhamnusium gracilicorne, insect pests, broadleaves, Kazakhstan, disease vectors, bacterial diseases 10019

Rhaphiolepis umbellata
- bacterial diseases, *Pseudomonas syringae,* galls, Japan, new species 2287
- insect pests, *Adalia bipunctata,* Japan 5761

Rheedia edulis, tropical forests, light, plant physiology 6259

Rhinoceros unicornis, wildlife, browsing damage, riparian forests, Nepal 692

Rhinoclemmys annulata, turtles, vegetation types, seed dispersal, Costa Rica 6515

Rhinoclemmys funerea, turtles, vegetation types, seed dispersal, Costa Rica 6515

Rhizobium
- bacteria, Fabaceae, tropical forests, Brazil 9071
- biofertilizers, *Acacia nilotica,* forest nurseries, India 142
- nodulation, *Leucaena leucocephala,* biomass production, plant nutrition 7391
- root nodules
  - *Acacia*
    - inoculation 2236
    - taxonomy, research 7389
  - *Acacia ampliceps,* salt tolerance, seedling growth, nitrogen fixation 6620
  - *Acacia auriculiformis,* seed germination, seedling growth 8255
  - *Acacia catechu,* seed germination, seedling growth 8255
  - *Acacia holosericea,* seed inoculation, growing media 2237
  - *Acacia mangium,* soil properties, Côte d'Ivoire, growth 9069
  - *Acacia nilotica*
    - salt tolerance 8268
    - seedling growth, mycorrhizas, nitrogen-phosphorus fertilizers 7385
  - *Chamaecytisus palmensis,* Australia 2241
  - *Dalbergia sissoo,* seed germination, seedling growth 8255
  - Fabaceae, taxonomy, Brazil 9070
  - nitrogen fixing trees, arid soils, India 2234
- symbiosis
  - *Leucaena diversifolia,* nitrogen fixation, seedlings, isotope dilution 8263
  - multipurpose trees, seedling growth, nitrogen fixation 3151
  - *Sesbania sesban*
    - nitrogen fixation, seedlings, isotope dilution 8263
    - seed inoculation 6880

Rhizobium *cont.*
- symbiosis *cont.*
  - *Sesbania sesban cont.*
    - seed inoculation *cont.*
      - aerial sowing 2242

Rhizobium loti, root nodules, *Leucaena leucocephala* 8270

Rhizoctonia
- fungal diseases
  - conifers
    - forest nurseries
      - Finland 5620
      - Norway 5620
  - *Pinus nigra,* forest nurseries, Italy, control 1467
  - *Pinus palustris,* USA, control 3171

Rhizoctonia solani, fungal diseases, *Paulownia fortunei,* India, seedlings 3163

Rhizophora
- afforestation, erosion control, India 3225
- mangrove forests, forest influences, soil properties, variation, Nigeria 8022
- mangroves, epidermis, morphology, taxonomy, Nigeria 3724
- palaeobotany, America, reviews 6528

Rhizophora apiculata
- adaptation, foliage, anatomy, chlorophyll, India 9790
- foliage, light, phenolic compounds 434
- mangroves
  - foliage, pigments, seasonal variation, India 4675
  - photosynthesis, treatment 4713
  - spacing, increment, Indonesia 1776
- planting, mangrove forests, estuaries, India 6113
- seedling growth, plant nutrition, potassium 6113
- vegetative propagation, hypocotyls, India 2603
- wood properties, Vietnam 4641

Rhizophora lamarckii, mangroves, foliage, pigments, seasonal variation, India 4675

Rhizophora mangle
- birds, *Haliaeetus leucocephalus,* USA, nesting 3197
- epiphytes, Cyanobacteria, nitrogen fixation, Guadeloupe 537
- foliage, Belize, damage 625
- mangroves
  - geographical distribution, Mexico 7264
  - habit, plant physiology, salinity, plant nutrition 465
  - mutations, Puerto Rico, pigments 5520
  - oil spills
    - Panama
      - damage, ecology 4575, 4577, 6357
      - persistence 4576
  - rhizosphere, species diversity, Venezuela 518
  - roots, biomass, Cuba 7149
  - stand structure, soil properties, Nigeria 7293
  - water pollution
    - indicator plants, mutations, assessment 9052
    - polycyclic aromatic hydrocarbons, Puerto Rico, mutations 8857
- natural regeneration
  - recruitment, environmental factors, Belize 6575
  - silvicultural systems, clear strip felling, Ecuador 9490
- seedling growth, nutrient availability, light intensity 5386
- soil chemistry
  - Brazil 1092
  - flooding, USA 3937
- vegetation types, America 6548
- water uptake, habit, USA 3609

Rhizophora mucronata
- agroforestry, aquaculture, Indonesia 1528
- fisheries, Sri Lanka 9232
- insect pests, *Pteroma plagiophleps,* India 9150

Rhizophora mucronata *cont.*
- mangrove forests
  - remote sensing, synecology, India 6996
  - seedlings, survival, environmental factors 5128
- mangroves
  - foliage
    - Kenya, chemistry 4676
    - pigments, seasonal variation, India 4675
- natural regeneration, crabs, Bangladesh 7257

Rhizophora stylosa, foliage, light, Australia, phenolic compounds 434

Rhizopogon, mycorrhizas, conifers, host specificity 5602

Rhizopogon luteolus
- mycorrhizas
  - *Pinus sylvestris*
    - foliage, extracts, allelopathy 2245
    - Netherlands 9074

Rhizopogon roseolus
- mycorrhizas
  - *Pinus halepensis*
    - fertilizers, refuse, Spain 4002
    - seedling growth, Spain 4844

Rhizopogon vinicolor
- mycorrhizas
  - *Pinus sylvestris*
    - development
      - seedlings
        - *Frankia* 7388
        - soil bacteria 7388
  - *Pseudotsuga menziesii,* forest litter, decomposition 4005

Rhizosphaera kalkhoffii, fungal diseases, *Picea abies,* resistance 867, 6885

Rhizosphere
- *Acer pseudoplatanus,* soil biology, enzymes, root systems, UK 5274
- *Alnus glutinosa,* soil bacteria, seasonal variation, nitrogen cycle, Spain 1923
- forest trees, soil biology, microorganisms, Cuba 1107
- forests, acid soils, soil analysis, cations 5236
- *Frankia, Alnus glutinosa* 8278
- Hyphomycetes, *Alnus glutinosa* 8278
- mycorrhizas, *Casuarina equisetifolia,* India 3157
- pH, mycorrhizas, *Suillus collinitus, Pinus pinaster,* seedlings 8257
- *Picea abies*
  - root systems, fertilizers, soil chemistry, Sweden 7749
  - soil chemistry, roots, distribution, Sweden 9684
- *Picea sitchensis,* soil biology, enzymes, root systems, UK 5274
- protozoa, mycorrhizas, conifers 5606
- species diversity, mangroves, *Rhizophora mangle,* Venezuela 518
- Zygomycetes, *Alnus glutinosa* 8278

Rhizosphere fungi, mycorrhizas, *Glomus macrocarpum, Leucaena leucocephala* 5605

Rhododendron, cloud forests, synecology, altitude, land use, Nepal 1371

Rhododendron arboreum
- forests, synecology, stand structure, natural regeneration, India 2167
- precipitation, canopy, cycling, India 10085
- throughfall, stemflow, interception, India 706

Rhododendron campanulatum, mountain forests, cycling, India 3633

Rhododendron ferrugineum, frost resistance, acclimatization, photosynthesis 1886

Rhododendron indicum, container grown plants, irrigation, USA 6756

Rhododendron macrophyllum, mycorrhizas, forest ecology, USA 6610

Rhoiptelea chiliantha, embryology, taxonomy 7166

Rhopalosiphum padi, insect pests, *Prunus virginiana,* Canada 7436

Rhus acuminata, medicinal plants, antiviral properties 8688

Rhus chinensis
- insects, *Schlechtendalia chinensis,* galls, China, biology 9132
- medicinal plants, East Asia, antibacterial properties 1813

Rhus hirta, air pollution, zinc, foliage, chemistry, USA 9748

Rhus javanica
- medicinal plants, haematological properties 8690
- reclaimed land, marine sediments, Japan, stand development 6703

Rhus verniciflua, enzymes, laccase 8103

Rhyacionia buoliana
- insect pests
  - Argentina 2301
  - *Pinus,* Ukraine, population dynamics 7450-7451
  - *Pinus radiata,* Chile, integrated control 1501

Rhyacionia frustrana
- insect pests
  - *Pinus,* plant composition, host specificity 6451
  - *Pinus caribaea,* Cuba, biological control 1499-1500
  - *Pinus taeda,* USA, population dynamics 5728

Rhyparida limbatipennis, insect pests, broadleaves, forest decline, Australia 7204

Ribes, wildlife, *Alces alces,* browse, forests, Poland 7534

Richeria grandis
- gas exchange, light, Guadeloupe, adaptation 4682
- wind damage, Guadeloupe, susceptibility 1063

Ricinus communis, street trees, air pollution, dust, damage, Pakistan 4550

Rights of way
- *Acer rubrum,* wetlands, weed control, USA 1754
- birds, herbicides, woody weeds, USA 165
- broadleaves, USA, control, plant growth regulators 941
- cutting frequency, broadleaves, natural regeneration, USA 1332
- mountain forests, weed control, woody weeds, USA 7784
- plant succession, forest trees, USA 7310
- valuation, Germany 9658
- wildlife, birds, USA 4922

Ring-barking (*see* Girdling)

Rinorea deflexiflora, insect pests, *Atta cephalotes,* Costa Rica, predators, *Paraponera clavata* 6661

Risk, afforestation, agricultural land, USA, economics, decision making 9256

Risk assessment, forestry practices, water pollution, USA 3676

Riverbank protection, agroforestry, pollution control, buffer zones, USA 9273

Riverbanks, riparian forests, erosion, mechanics, UK 4086

Riverside plantations
- *Salix,* erosion control, Netherlands 5842
- synecology, man, riparian forests, Poland 1175

Roadside plantations
- forest trees, forest influences, air pollution, Japan 7126
- *Pinus sylvestris,* salt injury, foliage, chemistry, Finland 348

Robinia, fungal diseases, *Nectria cinnabarina,* USA, chemical control, testing 2293

Robinia neomexicana, soil parent materials, soil chemistry, USA, forest influences 3694

Robinia pseudoacacia
- agroforestry, pot experimentation 9275
- air pollution
  - heavy metals, indicator plants, Greece 7106
  - sulfur dioxide, salt injury, Europe 3644
- allelopathy, crops 546
- bark
  - chemistry, esters 1253

- ***Robinia pseudoacacia*** *cont.*
  - bark *cont.*
    - gene expression, lectins 2215
    - molecular genetics 5563
    - triterpenoids, glycosides 441
  - breeding programmes, frost resistance, Chile 7362
  - degraded forests, forest decline, urban areas, Korea Republic 9312
  - foliage, air pollution, sulfur dioxide, photosynthesis, nutrient uptake 7182
  - forest nurseries, plant nutrition, India 6089
  - forest plantations
    - biomass production, distribution, India 1837
    - wood chemistry, USA 8919
  - forests, energy balance, evapotranspiration, China 8161
  - fungal diseases
    - forest nurseries, biological control, Russia 10020
    - *Fusarium*
      - edaphic factors 8297
      - India 2255
  - genetic variation, coppicing, suckering, USA 2211
  - insect pests
    - Lepidoptera, Japan 5706
    - *Lymantria dispar,* Yugoslavia, pathogens 2325
    - *Phyllonorycter robiniella,* Italy, biology, damage 2334
    - USA, canopy gaps, phenolic compounds 2306
  - intensive silviculture
    - pulpwood production, biomass production, Korea Republic 8710
    - stand density, biomass production, Korea Republic 8709
  - mulches, decomposition, agroforestry, USA 9276
  - natural regeneration, rights of way, cutting frequency, USA 1332
  - nitrogen cycle, USA, measurement, nitrification 3621
  - nitrogen fixation, measurement, isotope dilution 6321
  - photosynthesis, light, temperature, carbon dioxide, genetic variation 1267
  - reclamation
    - landfills
      - species trials
        - plant nutrition, UK 4948
        - UK 4947
    - mined land, tillage, USA 4093
  - seed treatment, seedlings, photosynthesis 5064
  - seedlings
    - photosynthesis
      - defoliation, shading, branches 2076
      - leaf conductance, stomata, diurnal variation 2077
      - plant nutrition
        - nitrogen
          - foliage 2078
          - growth 2078
  - short rotation forestry, biomass production, India 1736
  - stem form, taper, allometry, USA 6409
  - transplanting, Germany 4979
  - weed control, USA, herbicides 8644
  - wood anatomy, injuries, tyloses 398
  - wood chemistry, carbohydrates, flavonols, coumaric acids 2981
  - wood properties, wood anatomy, methodology, boring 2494
- **Rodents**
  - *Aethomys chrysophilus,* seed predation, *Acacia,* savannas, South Africa 4068
  - *Apodemus flavicollis, Fagus sylvatica,* Spain 10060
  - *Castor fiber,* plant succession, Netherlands, foraging 2386
  - damage, broadleaves, provenance trials, Sweden 4055
  - Geomyidae, USA, population dynamics, sampling 7671
- **Rodents** *cont.*
  - *Microtus agrestis, Betula pendula,* fodder, Finland 6678
  - pests, *Pinus patula,* South Africa, forest plantations, control 1516
  - *Picea sitchensis,* forest plantations, UK 7542
  - *Pinus halepensis,* fire ecology, Israel 1196
  - *Pinus jeffreyi,* seed dispersal, USA 691, 693
  - *Praomys natalensis,* seed predation, *Acacia,* savannas, South Africa 4068
  - predators, seeds, rain forests, Australia 4050
  - rain forests, Brazil, population ecology 9215
  - *Rattus norvegicus,* damage, *Nothofagus,* natural regeneration, New Zealand 4756
  - *Saccostomus campestris,* seed predation, *Acacia,* savannas, South Africa 4068
  - trapping, Germany 10079
- **Romania**
  - *Abies alba*
    - cones, seeds, production 8949
    - fertilizers, lime, mycorrhizas, soil chemistry 1715
  - deciduous forests, *Carpinus betulus* 3926
  - forest health, insect pests, damage, control 8524
  - forest trees, stand density, basal area, allometry 8662
  - *Fraxinus excelsior*
    - provenance trials 8561
    - stand characteristics, basal area 8661
  - fungal diseases, *Cronartium ribicola, Pinus cembra,* hybrids, disease resistance 2186
  - insect pests, forest trees, control 9188
  - *Picea abies,* plant morphology, crown, phenotypic variation 9031
  - *Picea pungens,* silvicultural characters, stand characteristics 8663
  - *Pinus cembra*
    - genetic variation, cones, seeds 9040
    - hybrids, genetic variation, growth 2186
  - *Pinus wallichiana,* tree breeding, progeny testing 5490
  - *Quercus petraea,* mycorrhizas, soil chemistry, forest decline 8773
  - steppes 3920
  - wildlife conservation 7596
- **Root and butt rots** (*see* Fungal diseases)
- **Root exudates,** *Pinus sylvestris,* soil chemistry, Russia 4604
- **Root nodules**
  - *Acacia,* Africa, conferences, research 6807
  - *Alnus hirsuta, Frankia,* Japan 9999
  - *Bradyrhizobium*
    - *Acacia*
      - inoculation 2236
      - taxonomy, research 7389
    - *Acacia ampliceps,* salt tolerance, seedling growth, nitrogen fixation 6620
    - *Acacia auriculiformis,* IAA 5589
    - *Acacia mangium*
      - morphology, soil chemistry 6612
      - soil properties, Côte d'Ivoire, growth 9069
    - *Chamaecytisus palmensis,* Australia 2241
    - Fabaceae, taxonomy, Brazil 9070
    - *Faidherbia albida,* Senegal 8266
    - *Maackia amurensis,* seedling growth 6608
  - broadleaves, histology 5586
  - Caesalpinioideae, surveys 2235
  - *Casuarina cunninghamiana,* plant growth regulators 5588
  - *Casuarina equisetifolia,* nitrogen cycle, India 5568
  - *Coriaria arborea,* enzyme activity, nitrogenase 2064
  - development
    - *Calliandra calothyrsus,* seedling growth, temperature 6621
- **Root nodules** *cont.*
  - development *cont.*
    - *Sesbania sesban,* seedling growth, temperature 6621
  - *Erythrina poeppigiana,* pruning, Costa Rica, effects 9991
  - Fabaceae
    - nitrogen fertilizers, seedling growth 5288
    - nitrogen fixation, Tropics, reviews 6320
  - *Faidherbia albida,* Africa, conferences, research 6807
  - flavonoids, interactions, reviews 9815
  - *Frankia*
    - *Allocasuarina,* Uruguay, nitrogenase 1443
    - *Alnus firma,* Japan, inoculation 4010
    - *Alnus glutinosa* 8278
      - Netherlands, resistance 4852
      - nitrogen fixation 8264
      - UK, soil inoculation 2620
    - *Alnus rubra,* forest nurseries, USA, soil pH 2231
    - broadleaves
      - foliage, France, nutrients 1909
      - reviews 1447
      - USA 4848
    - *Casuarina* 6622
      - enzyme activity 2227
      - silt loam soils, New Zealand 3160
      - Uruguay, nitrogenase 1443
    - *Casuarina cunninghamiana*
      - nitrogen fixation 2230
      - seedling growth, soil types, phosphorus fertilizers 6904
    - *Casuarina equisetifolia*
      - roots, colonization 4011
      - seedlings, inoculation, testing 6624
    - *Casuarina glauca,* genetic transformation, roots, morphology 9994
    - *Coriaria nepalensis,* ultrastructure 3150
    - *Myrica gale,* haemoglobin 8269
  - Hyphomycetes, *Alnus glutinosa* 8278
  - lipids, *Alnus incana,* nitrogen fixation, gas exchange 5587
  - nitrogenase, *Alnus incana,* water stress, photosynthesis 7943
  - *Penicillium nodositatum, Alnus incana,* infection, root hairs 599
  - *Prosopis juliflora,* nitrogen fixation, seedlings, measurement, isotope dilution 10002
  - *Rhizobium*
    - *Acacia*
      - inoculation 2236
      - taxonomy, research 7389
    - *Acacia ampliceps,* salt tolerance, seedling growth, nitrogen fixation 6620
    - *Acacia auriculiformis,* seed germination, seedling growth 8255
    - *Acacia catechu,* seed germination, seedling growth 8255
    - *Acacia holosericea,* seed inoculation, growing media 2237
    - *Acacia mangium,* soil properties, Côte d'Ivoire, growth 9069
    - *Acacia nilotica*
      - salt tolerance 8268
      - seedling growth, mycorrhizas, nitrogen-phosphorus fertilizers 7385
    - *Chamaecytisus palmensis,* Australia 2241
    - *Dalbergia sissoo,* seed germination, seedling growth 8255
    - Fabaceae, taxonomy, Brazil 9070
    - nitrogen fixing trees, arid soils, India 2234
  - *Rhizobium loti, Leucaena leucocephala* 8270
  - surveys
    - Fabaceae, Senegal 2236
    - *Sesbania sesban,* oxisols, Zaire 2240
  - Zygomycetes, *Alnus glutinosa* 8278
- **Root pruning**
  - *Magnolia grandiflora,* transplanting, USA, growth 3285

Root pruning *cont.*
- *Picea abies,* reproductive behaviour, seed orchards, plant growth regulators, Sweden 3828
- *Picea mariana,* cones, gibberellins, production 9847

Root shoot ratio
- *Betula pendula,* plant nutrition 7955
- *Parkinsonia aculeata,* plant water relations, water stress, seedling growth 1112
- *Pinus sylvestris,* biomass distribution, seasonal variation 5183

Root systems
- *Abies alba,* planting stock, root pruning, Germany 6109
- *Acer pseudoplatanus,* rhizosphere, soil biology, enzymes, UK 5274
- agroforestry, choice of species, plant competition, soil fertility 10100
- *Betula,* measurement 2034
- *Betula lenta,* nitrogen 2020
- *Betula pendula,* genetic variation, UK 1439
- broadleaves, Germany, spatial distribution 4661
- *Chamaecyparis obtusa,* slopes, Japan, erosion control 5839
- development, *Quercus robur* 2962
- forest ecology, plant nutrition 8139
- forest trees
  - morphology 404
    - development 7164
  - NPK fertilizers, development, density 3407
  - slopes, Japan, stability 4600
- interactions, building construction, amenity trees, UK, standards 10140
- methodology, multipurpose trees, mathematical models 7666
- mixtures
  - *Larix sibirica*
    - *Betula pendula,* plant competition, Russia 2656
    - *Picea abies,* plant competition, Russia 2656
    - *Pinus sylvestris,* plant competition, Russia 2656
- multipurpose trees, agroforestry, pruning, plant competition, Indonesia 10102
- *Picea abies*
  - drought, fertilizers, Sweden 8047
  - fertilizers, soil chemistry, rhizosphere, Sweden 7749
- *Picea sitchensis,* rhizosphere, soil biology, enzymes, UK 5274
- *Pinus taeda,* seedlings, methodology 9332
- *Quercus,* plant water relations, soil water, France 5280
- tropical forests, carbon cycle, plant water relations, Brazil 4085

Roots
- *Acacia,* shoot cuttings, plant growth regulators, IBA 7736
- *Acer saccharum*
  - mulching, plant water relations, USA 4300
  - plant morphology, USA 409
- adventitious roots
  - *Ceratopetalum virchowii,* stemflow, nutrients, Australia 391
  - *Senecio cooperi,* epiphytes, plant nutrition, Costa Rica 3732
- amenity trees, phenology, transplanting 5908
- *Arctostaphylos viscida,* soil physical properties, soil parent materials, USA 4486
- bark, *Garcinia subelliptica,* xanthones 9810
- biomass
  - dynamics, broadleaved evergreen forests, India 3712
  - growth, deciduous forests, cycling, USA 2855
  - *Picea abies,* liming, soil chemistry, Sweden 9460
  - *Pinus sylvestris,* liming, soil chemistry, Sweden 9460

Roots *cont.*
- *Boswellia serrata,* soil chemistry, nitrogen, India 5303
- broadleaves
  - girdling, wire 1981
  - soil physics, plant competition, Australia 3059
  - USA, growth 1229
  - vegetative propagation, shoot cuttings 2582
- cell division, *Picea sitchensis,* air pollution, ozone 7998
- *Chamaecyparis nootkatensis,* planting stock, gas exchange, plant water relations, Canada 4335
- chemistry
  - seasonal variation
    - *Betula pubescens,* Sweden 9826
    - *Populus tremula,* Sweden 9826
  - *Sophora secundiflora,* chemotaxonomy, flavonoids 9841
- conifers
  - air pollution, Sweden, soil, distribution 5319
  - frost resistance, planting stock, cold storage 3558
  - stumps, decay fungi, Sweden 9989
- *Cycas revoluta,* symbiosis 4842
- cycling, forest litter, biomass production, estimation 321
- *Dacrydium xanthandrum,* suckering, natural regeneration, Sabah 7159
- damage to, distribution, *Quercus douglasii,* seedlings 3726
- deciduous forests, forest litter, decomposition, USA 2824
- decomposition, *Picea abies,* nitrogen cycle, Estonia 7893
- development
  - coniferous forests, methodology 5009
  - *Eucalyptus globulus,* fertilizers, irrigation, Portugal 8048
  - morphology
    - *Casuarina equisetifolia,* plant nutrition, phosphorus 2941
    - conifers, genetic engineering, *Agrobacterium rhizogenes* 3133
  - mycorrhizas
    - *Hebeloma crustuliniforme, Pinus ponderosa,* translocation 4004
    - *Laccaria bicolor, Pinus ponderosa,* translocation 4004
  - *Pinus,* acid deposition, seedlings 7100
  - *Pinus pinea*
    - assimilation, plant nutrition 2965
    - plant growth regulators 2964
  - *Pinus resinosa,* forest fires, Canada 3866
  - *Populus,* shoot cuttings, USA 2031
  - *Populus tremula × Populus tremuloides,* tissue culture, biochemistry, polyamines 3774
  - *Quercus suber,* shoot cuttings 6891
- distribution
  - biomass
    - broadleaves, forest plantations, India 2952
    - *Populus* 'G-3', spacing, India 2658
  - deciduous forests, canopy gaps, USA 3109
  - *Picea abies,* soil chemistry, rhizosphere, Sweden 9684
  - *Pinus sylvestris,* soil types, statistical analysis, Kazakhstan 6408
- dynamics
  - forest trees, cycling, reviews 406
  - *Gliricidia sepium,* agroforestry, plant competition, Côte d'Ivoire 8425
  - *Pinus sylvestris,* cycling, peatlands, Finland 407
  - wind damage, Puerto Rico 1068
- enzymes, *Eucalyptus globulus,* mycorrhizas, *Pisolithus* 3155
- *Eucalyptus globulus,* irrigation, fertilizers, soil properties, Portugal 8767
- *Fagus sylvatica,* respiration, Germany 7185

Roots *cont.*
- forest trees
  - biomass, Slovakia 6964
  - carbon dioxide enrichment
    - methodology 6423
    - plant water relations, plant nutrition 9670
  - dendrochronology, Germany 6760
  - frost resistance, Russia 279
  - ground vegetation, plant competition, soil fertility, theory 3875
  - methodology 9344
  - seedlings, Canada, morphology 9784
  - soil biology, carbon dioxide enrichment, simulation 6263
  - soil physical properties, soil parent materials, USA 4486
- *Fraxinus pennsylvanica,* planting, soil texture, growth 2056
- fungal diseases
  - *Heterobasidion annosum, Pinus sylvestris,* decay, anatomy 7396
  - *Phytophthora cinnamomi, Eucalyptus globulus,* enzymes 3772
- galls, anatomy, *Calamus rotang,* plant parasitic nematodes, embryo culture 8347
- growth
  - *Alnus incana,* biomass production, Sweden 6189
  - *Dalbergia sissoo,* seedlings, water stress 314
  - development, forest trees, nitrogen 6897
  - *Pinus pinaster,* water stress, turgor 7942
  - *Pinus pinea,* seedlings, plant growth regulators, cytokinins 448
  - *Populus grandidentata,* carbon dioxide enrichment, nitrogen 6433
  - *Prosopis chilensis,* seedlings, water stress 314
  - *Prunus serotina,* containers 4978
- Gymnosperms, chemotaxonomy, mitosis, ascorbic acid 9899
- hydraulic conductivity
  - measurement 310
  - *Picea abies,* measurement 7072
  - simulation 310
- lenticels, *Pinus sylvestris,* plant water relations 2942
- longevity, mycorrhizas, *Glomus mosseae, Populus* 'Beaupré' 10000
- *Macrozamia communis,* symbiosis, morphology 3729
- mangroves, biomass, Cuba 7149
- mechanics, *Eucalyptus,* heartwood, Australia 6405
- *Michelia champaca,* bark, sesquiterpenoid lactones 9805
- *Miconia cabacu,* morphology, development 5384
- morphology
  - adaptation
    - *Arbutus menziesii,* USA 9794
    - *Arctostaphylos viscida,* USA 9794
  - *Picea abies*
    - nutrient uptake
      - fertilizers, Sweden 9788
      - irrigation, Sweden 9788
  - *Pinus elliottii,* genetic variation 5598
  - *Pinus taeda,* carbon dioxide enrichment, nitrogen 6432
  - plant nutrition, reviews 8890
  - tropical forests, forest trees, mycorrhizas, French Guiana 4640
- mortality, *Acer saccharum,* soil temperature, USA 2030
- mycorrhizas
  - *Glomus fasciculatum, Casuarina equisetifolia,* colonization 4011
  - *Pisolithus tinctorius*
    - *Eucalyptus globulus*
      - development, morphology 5573
      - enzymes 3772
  - *Sciadopitys verticillata* 8282
- natural grafting, *Dacryodes excelsa,* Puerto Rico 1219
- natural pruning, forest nurseries, equipment 2623

Roots *cont.*
- nutrients, analysis, *Eucalyptus nitens*, techniques 5010
- *Picea abies*
  - acid deposition, damage 8839
  - biomass, air pollution, Slovakia 7151
  - enzymes
    - measurement 3007
    - plasma membranes, aluminium, toxicity 6478
  - nutrient deficiencies, cytokinins, metabolism 4698
  - plant water relations 5285
  - seedlings, soil toxicity, soil pH, aluminium 7920
  - soil amendments, Sweden 3419
- *Picea glauca*
  - plant nutrition
    - nitrogen
      - ammonium 9729
      - nitrate 9727-9728
- *Pinus banksiana*, drought resistance, plant physiology, protein synthesis 1273
- *Pinus contorta*, container grown plants, Canada, growth 2046
- *Pinus elliottii*, nutrient uptake, simulation 5301
- *Pinus pinea*, fertilizers, development, growth 1716
- *Pinus resinosa*, nutrient allocation, carbon, USA 7076
- *Pinus sylvestris*
  - foliage, microbial flora, Poland 7382
  - nutrient uptake
    - magnesium
      - measurement 9726
      - techniques 9726
  - seedlings, plant physiology, outplanting 3802
  - stand characteristics, ground vegetation, biomass production, Finland 7152
  - understorey, fertilizers, Norway 7751
- *Pinus taeda*
  - biomass, USA, measurement 8501
  - mixed forests, USA, distribution 6425
- *Pinus wallichiana*, growth rings, variation 6416
- planting stock, forest litter, Canada, morphology 6900
- *Populus eugenei*, carbon dioxide enrichment, nitrogen cycle 7191
- porosity
  - *Taxodium distichum*
    - flooding
      - hypoxia
        - gas exchange 1120
        - increment 1120
- *Pseudotsuga menziesii*, container grown plants, Canada, growth 2046
- *Quercus laurifolia*, container grown plants, morphology, growth 1733
- *Quercus rubra*, planting stock, USA, morphology, grading 6078
- respiration, *Pseudotsuga menziesii*, soil chemistry 4707
- root nodules
  - forest trees, inoculation 4841
  - *Frankia*, *Casuarina equisetifolia*, colonization 4011
  - Rosaceae, inoculation 4841
- *Salix viminalis*, electrical phenomena in trees, plant physiology 455
- *Sophora tetraptera*, chemistry, flavonoids 9832
- stems, mechanics 9797
- street trees, Sweden, damage, sewerage, systems 5911
- systems, *Picea abies*, site types, Russia 8060
- *Taxodium distichum*, flooding, shoots, biomass production 312
- testing, conifers, Sweden, tetrazolium compounds 1885
- *Thujopsis dolabrata*, stem form, snow damage, Japan, plant morphology 4631
- tropical forests, wind damage, cycling, Puerto Rico 3562

Roots *cont.*
- vegetation, carbon dioxide enrichment, synecology, books, conferences 6798
- vigour, *Picea abies*, fertilizers, Sweden 7750
- volume, *Pseudotsuga menziesii*, soil water content, plant physiology, growth 1725

Ropes, arboriculture, safety 10151

Rosa
- birds, *Lanius*, Spain, ecology 8373
- geographical distribution, taxonomy, Greece 1352

Rosellinia desmazieresii, fungal diseases, *Salix repens* 8313

Rosellinia necatrix, fungal diseases, *Populus*, Portugal, control 7411

Rosmarinus officinalis
- forest fires, simulation, Portugal 7132
- sclerophyllous scrub, habit, Spain 3705

Rosselia bracteata, taxonomy, Papua New Guinea, new genus 8964

Rotations
- deciduous forests, forest economics, USA, basal area 4460
- forest economics, forest management, theory 4994
- growth, *Picea sitchensis*, whole tree logging, UK 6110
- hydrology, valuation, mathematical models 3224
- *Pinus patula*, forest plantations, forest litter, Swaziland 7895
- *Pinus radiata*, forest plantations, economics, Australia 6247
- *Pinus taeda*, forest economics, USA, simulation 6990
- tax incentives, carbon, storage, Canada 8546

Royalties (*see* Stumpage value)

Rozites
- mycorrhizas
  - Myrtaceae, forests, Australia 5592
  - *Nothofagus*, forests, Australia 5592

Rubiaceae
- flora, India 7250
- foliage, chemistry, glucosides 9818
- taxonomy
  - conferences 8484
  - Costa Rica 7239

Rubus, birds, *Lanius*, Spain, ecology 8373

Rubus ellipticus, seeds, storage, seed germination, reclamation, India 79

Rubus fruticosus, energy value, seasonal variation, forest fires, fire danger, Spain 9773

Rubus idaeus
- control, *Picea mariana*, Canada 6931
- weed control, *Picea mariana*, Canada 8633-8634

Rubus parviflora, woody weeds, control, Canada 163

Rudgea citrifolia, wind damage, Guadeloupe, resistance 1063

Runoff (*see also* Streams)
- broadleaves, air pollution, soil chemistry, Norway, nitric acid 5320
- chemistry, methylmercury, hydrology, Sweden 8795
- deciduous forests, acidification, USA 3574
- *Eucalyptus occidentalis*, forest plantations, silvicultural conversion, coppice, Italy 4935
- forest influences
  - hydrology, precipitation, Japan, statistics 7550
  - watersheds
    - Malawi, simulation 8870
    - Sri Lanka 2399
- logging, USA 8380
- mixed forests
  - clear strip felling
    - evapotranspiration, Japan 4931
    - Japan, logging effects 4934
  - *Pinus radiata*, clear felling, burning, erosion, Chile 5843
  - *Pinus thunbergii*, fertilizers, sewage, nitrogen cycle, Japan 3413

Runoff *cont.*
- protection forests, water quality, Russia 4603
- rain forests, logging, erosion, Sabah 4087
- site preparation, burning, USA 5134
- storms, conifers, streams, Japan, chemistry 1533
- woodlands, erosion, USA 5837

Rural development
- forest policy
  - forest economics, China 5982
  - forestry development, Finland 5029
- forest resources, biomass, for energy, conferences 6790
- forestry, cooperatives, Japan, sociology 6847
- fuelwood
  - resources
    - social forestry
      - India
        - books 7628
        - constraints 7628
- non-wood forest products, cottage industry, India 6141

Rural economy
- *Abies religiosa*, forest management, nature conservation, simulation, Mexico 3280
- *Eucalyptus*, forest plantations, forest policy, Congo 8534
- forest resources, forest management, cooperatives, Developing Countries 4463
- forests, India 9554
- minor forest products, collection, India, tribes 8672
- non-wood forest products, collection, India 6156
- *Orbignya phalerata*, fruits, Brazil 7799
- *Pinus halepensis*, agroforestry, land use planning, forestry development 8424
- *Trichilia*, seed crops, Zimbabwe 195

Rural women, deforestation, forest management, sustainability, Sri Lanka 4105

Russia
- air pollution
  - degraded forests 1157
  - resistance, amenity and recreation areas, choice of species 5905
- *Alnus glutinosa*
  - plant succession, clear felling 5462
  - vegetation types, soil types 300
- amenity and recreation areas, forest inventories 1584
- bacterial diseases
  - *Elaeagnus*, disease vectors, *Scolytus jaroshevskii* 10017
  - *Ulmus* 10018
- balloons, forest fires, fire suppression 4611
- *Betula*, boreal forests, thinning, biomass production 9527
- *Betula lanata*, stand characteristics 2153
- *Betula pubescens*, treelines, distribution 7263
- bogs, classification 533
- boreal forests
  - air pollution, stand characteristics 7994
  - carbon cycle 6449
    - climate, simulation 328
    - mapping 1952
  - flora 5437
  - forest fires, history 8027
  - forest management
    - landscape 5195
    - sustainability, international cooperation 9941
  - land classification, soil, mapping 5210
  - plant succession, simulation 7322
  - soil morphology 7906
  - stand development, statistical analysis 1407
  - thinning, conferences 6810
- carbon cycle 4544
- choice of species, afforestation, saline soils 2544
- computer techniques, information services 4228

Russia *cont.*

- coniferous forests, air pollution, simulation 7091
- conifers
  - afforestation, trials, international cooperation 9502
  - air pollution, photosynthesis 6335
  - forest plantations, fertilizers, soil types 5108
  - increment, diameter, air pollution 4569
  - isoenzymes, gene mapping 9044
  - natural regeneration, plant succession 1400
  - reclamation 3228
  - thinning, selection criteria 2652
- databases, vegetation types, information services 6836
- deer, *Alces alces, Betula alba,* stand development 7530
- drainage systems, maintenance, economics 8631
- edible fungi, radionuclides, uptake, soil types 7980
- fallout, forestry 9408
- finance, forest management 5041
- fire detection, microlight aircraft 5361
- forest decline, air pollution, international cooperation 6859-6860
- forest ecology, air pollution 5332
- forest economics, forest policy 2772
- forest fires
  - fire suppression
    - equipment 4609
    - planning 9771
  - spread, fire suppression 9772
- forest management, sustainability, simulation 4415
- forest ownership, legal rights 8751
- forest policy, legislation, forest management, economics, forest administration 9386
- forest trees
  - air pollution, fluorine, damage 1962
  - frost resistance, roots 279
  - soil physics 8772
  - treelines, grazing, climate 7277
- forestry
  - carbon cycle, climatic change, global warming 9661
  - education 5999
  - environment 44
  - history 5976-5977
  - legislation 4244
- forestry development, history 4235
- fungal diseases
  - *Gremmeniella abietina, Pinus sylvestris,* air pollution, damage 9118
  - *Robinia pseudoacacia,* forest nurseries, biological control 10020
- insect pests
  - Coleoptera, forest trees, disease vectors, decay fungi 9131
  - *Gonioctena pallida, Salix phylicifolia,* ecology 2351
  - Lepidoptera, *Quercus robur,* damage 10039
  - *Megastigmus bipunctatus, Juniperus communis* 664
  - *Neodiprion sertifer, Pinus sylvestris,* population dynamics, spatial distribution 10050
  - *Operophtera brumata, Quercus robur,* foliage, regeneration 10040
  - *Panolis flammea, Pinus sylvestris,* damage 4885
  - *Polydrusus ruficornis, Betula tortuosa,* ecology 2351
  - *Scolytus jaroshevskii, Elaeagnus,* disease vectors 10017
- *Juniperus sabina,* plant colonization, soil formation 1103
- *Larix,* nomenclature 8979
- *Larix sukaczewii,* forest health, experimental plots 5419
- lichens, urban forestry 7306
- mixtures
  - *Larix sibirica*
    - *Betula pendula,* root systems, plant competition 2656

Russia *cont.*

- mixtures *cont.*
  - *Larix sibirica cont.*
    - *Picea abies,* root systems, plant competition 2656
    - *Pinus sylvestris,* root systems, plant competition 2656
- peatlands, classification 533
- *Picea*
  - biomass production, biogeochemistry, plant nutrition, cycling 7970
  - boreal forests, thinning, biomass production 9527
  - forest litter, classification 7916
  - pollen
    - development, heat sums 5422
    - morphology 8059
- *Picea abies*
  - advance growth, clear felling, nitrogen fertilizers 4294
  - air pollution, damage, simulation 7993
  - Christmas trees, silviculture 965
  - forest plantations, spacing 1778
  - provenance trials 1658
  - roots, systems, site types 8060
  - seed collection, economics 854
  - site class assessment, soil properties 5186
  - site preparation 1751
  - treelines, distribution 7263
- *Pinus*
  - coniferous forests, plant succession, soil structure 285
  - stand structure, genetic variation, resin tapping 197
- *Pinus sibirica,* forest plantations, stand characteristics 5168
- *Pinus sylvestris*
  - air pollution
    - monitoring 9740
    - photosynthesis
      - carbon dioxide 2886
      - water stress 9751
    - plant composition 4568
    - plant nutrition 7094
  - branches, evapotranspiration, stand density 7146
  - crown, age 4388
  - forest health, air pollution, monitoring 9858
  - forest influences, understorey, air pollution 341
  - forest plantations, biomass, distribution, site types 232
  - genetic variation
    - chemotaxonomy 2181
    - isoenzymes, gene flow 571
    - population genetics 572
  - lichens, plant succession, fire 8170
  - nitrogen fertilizers, nutrient uptake 3409
  - NPK fertilizers, plant nutrition 7757
  - photosynthesis, edaphic factors 4712
  - plant growth regulators
    - seed production 2073
    - shoots, growth 2074
  - plus trees, progeny testing 9043
  - population genetics 2180, 5486
  - site class assessment
    - drainage 231
    - site factors, mathematics 5187
  - soil pollution, heavy metals 1920
  - stand development, light, simulation 7792
  - thinning, nitrogen fertilizers, forest economics 9517
- plant succession
  - canopy, classification, theory 7013
  - soil properties, simulation 1402
- pollution
  - fallout
    - forest fires 9736
    - forest influences, forestry workers 8829
- *Populus,* choice of species, site types 65
- *Populus tremula*
  - arboricides 2643
  - basal area 1818
  - dead trees, insects, endangered species 4027

Russia *cont.*

- *Populus tremula cont.*
  - natural regeneration, control, arboricides 8635
- protection forests
  - erosion control, forest steppe 4943-4944
  - runoff, water quality 4603
  - silviculture, Arid Regions 9234
- *Quercus mongolica,* forests, soil pollution, heavy metals 7977
- *Quercus robur*
  - artificial regeneration, sowing, stumps 934
  - natural regeneration, coppicing 4328
  - transpiration, water deficit, meteorological factors 7064
  - volume determination, remote sensing 8693
- reclamation
  - afforestation, shelterbelts, agroforestry, research, books 2455
  - shelterbelts, soil organic matter 5853
- Salicaceae, synecology 4780
- shelterbelts, reclamation, steppe soils 5854
- silviculture 4237
- site class assessment, history 7691
- soil biology, mycorrhizas, *Pinus,* seasonal variation, fertilizers 8802
- soil classification, forest soils 5267
- soil formation, chernozems 8789
- steppes
  - carbon cycle, climate, simulation 328
  - land classification, soil, mapping 5210
- vegetation types, photosynthesis, biodiversity 7198
- wildlife, small mammals, boreal forests, air pollution 8370
- yield regulation 8715
- Russian Far East
  - *Araucaria,* palaeobotany 4646
  - *Betula ermanii,* boreal forests, botanical composition 9926
  - birds, *Tetrao parvirostris, Larix gmelinii,* feeding behaviour 8360
  - coniferous forests, forest decline 8941
  - conifers, palaeobotany 3890
  - *Larix gmelinii*
    - firebreaks, silviculture 2914
    - mensuration, statistical analysis 2681
  - mixed forests, stand characteristics, botanical composition 2145
  - *Picea glehnii,* vegetation types 4779
  - *Pinus koraiensis,* mixtures, silviculture 9542
  - plant parasitic nematodes, *Bursaphelenchus mucronatus,* surveys 5780
  - soil formation, forest soils, reviews 5258
- Siberia
  - air pollution, boreal forests, damage 8838
  - *Betula,* synecology, botanical composition, geographical distribution 1353
  - boreal forests, natural regeneration, simulation, management 9965
  - conifers
    - forest plantations, weed control 2642
    - increment, diameter, climate 9592
    - wood properties, growth effects 9756
  - fire danger, assessment 9769
  - forest resources 2520
  - insect pests
    - *Anacampsis populella*
      - *Populus,* air pollution 649
      - *Salix,* air pollution 649
    - *Dendrolimus superans, Larix,* biology 644
    - Hymenoptera
      - *Betula,* air pollution 663
      - *Pinus,* air pollution 663
    - *Polydrusus ruficornis, Betula tortuosa,* damage 8336

- **Russia** *cont.*
  - Siberia *cont.*
    - *Larix,* tree breeding, progeny testing 5492
    - *larix gmelinii,* dendroclimatology 3289
    - *Larix sibirica*
      - clear felling, natural regeneration, biomass production 9494
      - dendrochronology 4992
      - geographical distribution 6536
    - *Larix sukaczewii,* genetic variation, isoenzymes 5495
    - *Pinus,* genetic variation, isoenzymes, growth rings 8193
    - *Pinus sibirica*
      - genetics, isoenzymes, polyembryony 8223
      - liberation felling, crown, development 9518
      - population genetics, synecology 4755
    - *Pinus sylvestris*
      - chromosomes, karyotypes 8194
      - increment, height, stand density 4410
      - plant morphology 4657
      - root exudates, soil chemistry 4604
      - seed banks 9937
      - seral stages 4795
    - remote sensing, image interpretation, vegetation types 4454
    - soil formation, forest soils, reviews 5258
    - species trials, reclamation, polluted soils, oilfields 4950
    - vegetation types, geographical distribution, climate, simulation 3938
- ***Russula,*** mycorrhizas, Dipterocarpaceae, nutrient uptake, seedlings 1448
- ***Russula amatica,*** mycorrhizas, Dipterocarpaceae, nutrient uptake, seedlings 1448
- ***Russula cyanoxantha,*** mycorrhizas, Dipterocarpaceae, nutrient uptake, seedlings 1448
- ***Russula ochroleuca,*** mycorrhizas, *Picea abies,* enzymes 9993
- **Rust diseases** (*see* Fungal diseases)
- ***Rustia alba,*** taxonomy, Ecuador 7235
- ***Rustia dressleri,*** taxonomy, Panama 7235
- ***Rustia viridiflora,*** taxonomy, Ecuador 7235
- **Rwanda**
  - agroforestry
    - indigenous knowledge, data collection, methodology 10105
    - socioeconomics 10110
  - browse plants, surveys 8680
  - *Eucalyptus,* forest plantations, development projects 8535
  - forestry, research projects, conferences 9323
  - medicinal plants 6952
  - multipurpose trees, agroforestry, species trials 4961
- **Sabah**
  - *Acacia,* tree breeding 9984
  - *Acacia mangium*
    - forest influences, hydrology, watersheds 2908-2909
    - forest plantations, increment 1748
  - *Alangium,* taxonomy 7229
  - Burseraceae, taxonomy 7226
  - canes and rattans
    - *Calamus,* species diversity, reproductive behaviour 2013
    - *Calamus subinermis,* stems, morphology, increment 7804
    - *Korthalsia furtadoana,* species diversity, reproductive behaviour 2013
  - *Dacrydium xanthandrum,* roots, suckering, natural regeneration 7159
  - forest trees, selective felling, soil degradation, logging effects 8771
  - *Ilex,* flora, checklists 7248
  - *Kokoona,* taxonomy 7227
  - medicinal plants
    - ethnobotany, methodology 7811
    - surveys, ethnobotany 2674, 9566
  - *Microtropis,* taxonomy 7227
- **Sabah** *cont.*
  - *Pittosporum,* taxonomy 7230
  - plant disorders, mountain forests, hydrology, cycling 3806
  - rain forests
    - canopy, precipitation, erosion 8012
    - clear felling, erosion 1748
    - logging, erosion, runoff 4087
    - species diversity, forest litter, measurement 2823
  - tropical forests, planting, logging, greenhouse effect, control 6254
  - wildlife, frogs, rain forests 9222
- ***Sabal etonia,*** autecology, USA 6525
- ***Sabal japa,*** liberation felling, Mexico, girdling, poisoning 2648
- ***Sabal palmetto,*** transplanting, USA, survival, growth 7608
- ***Sacchiphantes abietis,*** insect pests, *Picea glauca,* Canada 7442
- ***Saccostomus campestris,*** rodents, seed predation, *Acacia,* savannas, South Africa 4068
- ***Sacoglottis gabonensis***
  - foliage, photosynthesis, plant water relations, Cameroon 313
  - fruiting, elephants, *Loxodonta africana cyclotis,* Gabon 3223
  - rain forests, history, pollen analysis, Cameroon 2130
- **Safety**
  - arboriculture, ropes 10151
  - attitudes, surveys, New Zealand 7709
  - forest nurseries, pesticides, Nepal 6899
  - forestry, ergonomics, labour 822
  - forestry machinery, visibility, Japan, measurement 962
  - forestry workers, health, Finland 3359
  - labour, Japan 7712
  - noise, protective clothing, Canada 1648
  - training, private forestry, Germany 6003
- **Safety devices,** street trees, dangerous trees, Germany 10148
- **Sahel**
  - *Acacia,* shifting cultivation, nitrogen cycle, simulation 8429
  - *Acacia senegal,* agroforestry, nitrogen cycle, simulation 4118
  - agroforestry
    - bibliographies 5934
    - development projects, extension 10113
  - *Azadirachta indica,* forest decline 1300
  - forest management, sustainability, land use, reviews 7830
  - land use planning, management, agroforestry 1547
  - parasitic plants 8322
  - woody plants, ecosystems, agroforestry, semiarid zones, books 8466
- **Salamanders**
  - forest trees, clear felling, USA, population dynamics 3195
  - wildlife, coniferous forests, stand age, Canada 9221
- **Saline soils,** *Eucalyptus,* reclamation, Australia 711
- **Salinity**
  - control, *Eucalyptus camaldulensis,* agroforestry, USA 5870-5872
  - mangroves, *Rhizophora mangle,* habit, plant physiology, plant nutrition 465
- ***Salix***
  - agroforestry, Argentina 6735
  - bark, chemistry, polyphenols 7174
  - biomass production, energy, conferences 4999
  - birds, short rotation forestry, Germany 7540
  - branches, lichens, morphology, physiology, UK 8169
  - clones, molecular genetics, techniques 3998
  - deer, browsing damage, USA 5826
  - exotics, UK 5003
  - forests, evapotranspiration, Canada, simulation 7948
  - geographical distribution, Europe, analysis 2137
- ***Salix*** *cont.*
  - insect pests
    - *Anacampsis populella,* air pollution, Russia 649
    - foliage, USA 4032
    - Hemiptera, Iran, natural enemies 635
    - *Phyllocolpa,* galls, keys 2366
  - mammals, *Castor fiber,* Germany 6674
  - mined land, Germany, clay soils 1538
  - mycorrhizas, Norway 8261
  - photosynthesis, light 451
  - riverside plantations, erosion control, Netherlands 5842
  - root pruning, shelterbelts, crops, plant competition, New Zealand 2411
  - Scandinavia, geographical distribution 2136
  - shelterbelts, agricultural land 2402
  - short rotation forestry, biomass production, USA 6029
  - silviculture, UK, plant introduction 6148
  - snow damage, USA 4483
  - synecology, Russia 4780
  - taxonomy, North America 8136
  - vegetative propagation, indigenous knowledge, Nepal 6883
  - voles, *Clethrionomys glareolus,* Germany, trapping 3212
  - wetlands, plant succession, USA 2157
  - wildlife, *Alces alces,* browse, forests, Poland 7534
  - wind damage, Netherlands 1062
- ***Salix alaxensis***
  - genetic variation, isoenzymes, Canada 9062
  - reclamation, mined land, USA 3230
  - shoots, buds, reproductive behaviour 8122
- ***Salix alba***
  - biomass production, plant nutrition, Finland 5184
  - bottomland forests, natural regeneration, seed germination, Netherlands 9963
  - forest plantations, silviculture, Azerbaijan 1787
  - galls, tissue culture 6881
  - insect pests
    - *Dasineura,* Sweden 7496
    - *Plagiodera versicolora,* USA, biology 7468
  - mycorrhizas, *Tuber magnatum,* Italy 6609
- ***Salix amygdaloides***
  - coppice, buds, shoots 6392
  - riparian forests, natural regeneration, USA, site factors 8393
- ***Salix aquatica***
  - biomass production, plant nutrition, Finland 5184
  - NPK fertilizers
    - biomass, plant nutrition, Finland 7756
    - biomass production, Finland 5106
- ***Salix arctica,*** plant physiology, methodology 3321
- ***Salix babylonica***
  - aquatic fungi, endophytes, Pakistan 8253
  - foliage, hybrids, chemotaxonomy, flavonoids 583
  - forest nurseries, container grown plants, roots 4137
  - insect pests
    - *Nematus oligospilus,* Southern Africa, biology, damage 9175
    - *Paranthrene robiniae,* USA, insecticides 5792
- ***Salix burjatica***
  - coppice, foliage, UK, demography 6097
  - fungal diseases, *Melampsora,* UK 2276
- ***Salix caprea***
  - air pollution, fluorides, foliage, damage, Norway 5330
  - bark, edible species, cooking, palatability 1810
  - biomass production, plant nutrition, Finland 5184
  - insect pests, *Dasineura,* Sweden 7496
  - mycorrhizas, *Tuber magnatum,* Italy 6609
  - plant nutrition, pioneer species, Germany 2850

Salix cinerea
- reclamation, landfills, species trials, plant nutrition, UK 4948
- wildlife, *Alces alces,* browse, forests, Poland 7535

Salix cordata
- genetic variation, *Altica bimarginata,* resistance 5747
- insect pests
  - *Altica bimarginata*
    - dunes, plant succession 5742
    - foliage, morphology 5744
    - resistance, genetic variation 5747

Salix daphnoides
- *Cryptodiaporthe salicella,* Sweden 5643
- *Glomerella miyabeana,* Sweden 5643

Salix dasyclados
- bacterial diseases
  - *Pseudomonas syringae,* Sweden 8317
  - *Xanthomonas,* clones, resistance, Netherlands 1465
- biomass distribution, Sweden, estimation 6978
- biomass production, plant nutrition, Finland 5184
- coppice, foliage, UK, demography 6097
- *Cryptodiaporthe salicella,* Sweden 5643
- *Glomerella miyabeana,* Sweden 5643
- NPK fertilizers
  - biomass, plant nutrition, Finland 7756
  - biomass production, Finland 5106

Salix discolor
- fertilizers, sewage sludge, biomass production, Canada 9459
- short rotation forestry, weed control, soil water, Canada 917

Salix elegans, biomass production, India, equations 789

Salix eriocephala
- coppice, buds, shoots 6392
- fungal diseases, *Melampsora,* hybrids, resistance 5524
- genetic variation, isoenzymes 5553
- hybrids, insect pests, resistance 5524
- molecular genetics, DNA fingerprinting 5523

Salix exigua
- insect pests, *Rabdophaga,* USA 7495
- molecular genetics, DNA fingerprinting 5523

Salix fragilis
- insect pests
  - *Chrysomela lapponica,* plant composition 2352
  - *Nematus oligospilus,* Southern Africa, biology, damage 9175

Salix fragilis × Salix lispoclados, ovule culture, micropropagation 5083

Salix geyerana, insect pests, *Chrysomela aeneicollis,* USA 654

Salix gooddingii, water uptake, USA, riparian forests 1108

Salix hastata, air pollution, runoff, soil chemistry, Norway, nitric acid 5320

Salix helvetica, vegetation types, synecology, Slovakia 520

Salix herbacea, stomata, density, carbon dioxide, atmosphere, palaeoclimatology 3538

Salix lasiandra, insect pests, *Nematus calais,* USA, biology 2363

Salix lucida, biomass production, plant nutrition, Finland 5184

Salix matsudana
- plant water relations, Japan, site factors 3599
- transpiration, leaf conductance 3598

Salix matsudana × Salix alba, deer, *Cervus,* browse, New Zealand 9226

Salix miyabeana, molecular genetics, DNA fingerprinting 5523

Salix monticola
- plant colonization, peatlands, USA 9020
- plant nutrition, iron, waterlogging, USA 3638

Salix mucronata, vegetation types, forests, synecology, South Africa 5451

Salix myrsinifolia
- foliage, injuries, chemistry 6492

Salix myrsinifolia *cont.*
- insect pests
  - Chrysomelidae, attractants, phenolic compounds 7472
  - *Donacia antiqua,* foliage, plant physiology 6492
  - *Phratora vitellinae,* foliage, plant physiology 6492
- plant nutrition, nitrogen, seedling growth, phenolic compounds 6317

Salix nigra, insect pests, *Plagiodera versicolora,* USA, biology 7468

Salix nigricans, tree breeding, short rotation forestry, biomass production, Finland 5522

Salix orestera, insect pests, *Chrysomela aeneicollis,* USA 654

Salix pentandra
- foliage, injuries, chemistry 6492
- insect pests
  - Chrysomelidae, attractants, phenolic compounds 7472
  - *Donacia antiqua,* foliage, plant physiology 6492
  - *Euura amerinae,* plant composition, phenolic glucosides 5768
  - *Phratora vitellinae,* foliage, plant physiology 6492
- plant growth regulators, gibberellins, photoperiodism 6488, 8927
- seedlings, plant growth regulators, gibberellins 3017

Salix petiolaris, molecular genetics, DNA fingerprinting 5523

Salix phylicifolia
- insect pests, *Gonioctena pallida,* Russia, ecology 2351
- tree breeding, short rotation forestry, biomass production, Finland 5522

Salix planifolia
- fertilizers, mulching, seedling growth, Canada 6116
- plant colonization, peatlands, USA 9020

Salix psammophila, site class assessment, China 9600

Salix purpurea
- biomass production, plant nutrition, Finland 5184
- shoot cuttings, rooting, containers, USA 4272

Salix repens
- fungal diseases, *Rosellinia desmazieresii* 8313
- insect pests, *Dasineura,* Sweden 7496

Salix rorida
- bark, chemistry, polyphenols 7174
- molecular genetics, DNA fingerprinting 5523

Salix rubens, plant colonization, reproductive behaviour, USA 3947

Salix sachalinensis
- extractives, lignans, esters 1238
- molecular genetics, DNA fingerprinting 5523

Salix sericea
- fungal diseases, *Melampsora,* hybrids, resistance 5524
- genetic variation, insect pests, USA, resistance 7429
- hybrids, insect pests, resistance 5524

Salix setchelliana, seedlings, establishment, streams, USA 8173

Salix silesiaca, synecology, Slovakia 6550

Salix silicicola, genetic variation, isoenzymes, Canada 9062

Salix smithiana, biomass production, plant nutrition, Finland 5184

Salix tetrasperma
- shoot cuttings, India 1689
- street trees, air pollution, dust, damage, Pakistan 4550

Salix triandra
- biomass production, plant nutrition, Finland 5184
- bottomland forests, natural regeneration, seed germination, Netherlands 9963
- insect pests, Chrysomelidae, attractants, phenolic compounds 7472

Salix viminalis
- bacterial diseases, *Pseudomonas syringae,* Sweden 8317

Salix viminalis *cont.*
- biomass, growth models, nitrogen, Sweden 4210
- biomass distribution, Sweden, estimation 6978
- biomass production, plant nutrition, Finland 5184
- bottomland forests, natural regeneration, seed germination, Netherlands 9963
- coppice
  - buds, shoots 6392
  - foliage, UK, demography 6097
- *Cryptodiaporthe salicella,* Sweden 5643
- evaporation, diurnal variation, seasonal variation, Sweden 4080
- fertilizers, sewage sludge, biomass production, Canada 9459
- foliage
  - development, plant nutrition, nitrogen 2854
  - growth, plant nutrition, nitrogen, plant water relations 8054
  - nitrogen fertilizers, plant water relations, growth 3803
- forest plantations, silviculture, Azerbaijan 1787
- frost injury, plant physiology, statistical analysis 1064
- fungal diseases, *Melampsora,* UK 5647
- genetic defects, mathematics, methodology 589
- genetic variation, genotype environment interaction, increment, plant nutrition, soil types 4838
- *Glomerella miyabeana,* Sweden 5643
- ground vegetation, short rotation forestry, Germany 6554
- insect pests
  - *Dasineura marginemtorquens*
    - biology, behaviour 9133
    - Sweden, *galls* 5772
- plant nutrition, foliage, nutrients, analysis, Sweden 318
- plant water relations, seasonal variation, evapotranspiration, Sweden, simulation 3335
- roots, electrical phenomena in trees, plant physiology 455
- sap flow, plant water relations, Sweden 8811-8812
- short rotation forestry, weed control, soil water, Canada 917
- soil pH, Sweden, calcium, aluminium 3572
- water use efficiency, seasonal variation, biomass production, Sweden 3604

Salt glands, *Tamarix aphylla,* Australia 2071

Salt injury (*see also* Air pollution, salt spray)
- forest trees, forest decline, soil water, chemistry, Denmark 1295
- *Pinus sylvestris,* roadside plantations, foliage, chemistry, Finland 348
- *Platanus acerifolia,* street trees, UK 346
- street trees, air pollution, sulfur dioxide, Europe 3644

Salt tolerance
- *Acacia nilotica,* seedlings, growth, plant physiology 6469
- *Acer pseudoplatanus,* enzymes, pyrophosphatases, cell cultures 1286
- *Avicennia marina,* foliage, cytology 6424
- broadleaves
  - seedlings, flooding tolerance 6293
  - species trials
    - Australia
      - growth 5052
      - survival 5052
  - tree breeding, clones, waterlogging, Australia 3138
- *Eucalyptus*
  - seed germination, seedling growth 5413
  - seedlings, alkalinity, tolerance 2065
  - waterlogging, seedling growth, plant water relations, foliage 1115
- forest trees, genetic variation, plant physiology, reviews 1887
- *Kandelia candel*
  - seedling growth 4540

- **Salt tolerance** *cont.*
  - *Kandelia candel cont.*
    - seedling growth *cont.*
      - plant nutrition, copper, zinc 4539
  - mangroves
    - *Kandelia candel,* histology 9671
    - *Sonneratia,* Australia 6553
  - *Pinus pinaster*
    - plant nutrition, provenance trials 9712
    - provenance, France 4261
  - *Populus deltoides,* variety trials, pot experimentation 9417
  - *Prosopis juliflora,* seed germination, plant growth regulators 6035
  - root nodules
    - *Bradyrhizobium, Acacia ampliceps,* seedling growth, nitrogen fixation 6620
    - *Rhizobium*
      - *Acacia ampliceps,* seedling growth, nitrogen fixation 6620
      - *Acacia nilotica* 8268
  - *Suaeda monoica* 7041
  - *Taxodium distichum,* flooding, USA, genetic variation 5402
- ***Salvadora oleoides,*** vegetation, reclamation, sodic soils, India 712
- ***Salvadora persica,*** vegetation types, synecology, soil properties, deserts, Saudi Arabia 8162
- **Salvage felling and logging**
  - deer, *Capreolus capreolus,* Norway 6694
  - soil properties, USA, wetlands 4579
- ***Samanea saman*** (*see Albizia saman)*
- ***Sambucus nigra,*** foliage, enzymes, isoenzymes, seasonal variation, UK 3770
- ***Sambucus racemosa***
  - fungal diseases
    - *Microsphaera vanbruntiana*
      - France 5660
      - Spain 5660
- **Sample plot technique**
  - *Eucalyptus tereticornis,* forest plantations, growth models 6210
  - forest inventories
    - Germany 1023
    - growth models, methodology 3338
  - forests, nature conservation, India 4972
  - *Picea abies,* forest plantations, growth models 6210
  - *Pinus sylvestris,* basal area, measurement, Poland 993
  - relascopes, Italy 4440
  - reserved forests, nature conservation, increment, Zimbabwe 6816
  - *Tectona grandis,* forest plantations, growth models 6210
  - tropical forests, forest inventories 3507
- **Sampling**
  - *Abies balsamea,* natural regeneration, density, Canada 2500
  - *Acacia,* isoenzymes, methodology, techniques 1612
  - angle count, errors 8730
  - biomass 9352
  - forest health, France, monitoring 6994
  - forest inventories
    - Belgium, methodology 4432
    - forest health
      - Switzerland 9624
      - wildlife, USA 5004
    - increment, estimation 6213
    - simulation, regression analysis 5959
    - Sweden, methodology 6212
    - Switzerland, growth, yield forecasting 6211
    - techniques 1027
    - USA, methodology 4431
  - forest trees, plant morphology, measurement 6956
  - *Picea abies,* genetic variation, forest decline, air pollution, Italy 2191
  - *Picea mariana,* natural regeneration, density, Canada 2500
  - *Pinus halepensis,* natural regeneration, Italy, statistical analysis 1739
  - *Pinus pinaster,* forest inventories, stand characteristics, France 4433
- **Sampling** *cont.*
  - *Pinus sylvestris,* progeny testing, Finland 7674
  - *Populus,* photosynthesis, simulation 6826
  - stand characteristics, landscape, USA, variation 2166
  - stand density, estimation, simulation 1851
  - techniques, vegetation, species diversity, USA 9349
  - *Terminalia superba,* isoenzymes, methodology, techniques 1612
- **Sand dune stabilization,** broadleaves, forest plantations, Senegal 4939
- **Sand dunes** (*see* Dunes)
- ***Sandoricum koetjape,*** wood anatomy, Indonesia 6407
- ***Santalum,*** Pacific Rim 4168
- ***Santalum acuminatum,*** seed germination, seed treatment 6034
- ***Santalum album***
  - embryo culture, callus, plant composition, proteins 419
  - forest plantations
    - heartwood, soil properties, Indonesia 1985
    - Indonesia 930
  - gibberellins, flowering, induction, India 2099
  - heartwood, estimation, natural regeneration, Indonesia 6162
  - insect pests, *Amata passalis,* India, parasitoids 641
  - Pacific Rim 4168
  - parasitic plants, silviculture, India, host parasite relationships 186
  - planting stock, stumps, NPK fertilizers, India 1721
  - seed weight
    - seed germination
      - India 1679
      - seedling growth, Indonesia 6039
    - seedling growth
      - light, Australia 3535
      - photosynthesis, foliage, India 1261
  - seeds, artificial seeds, germination 6033
- ***Santalum austrocaledonicum,*** Pacific Rim 4168
- ***Santalum yasi,*** Pacific Rim 4168
- ***Santiria***
  - taxonomy
    - Sabah 7226
    - Sarawak 7226
- ***Santolina chamaecyparissus,*** browse, Mediterranean Region, phenolic compounds, techniques 437
- **São Tomé and Príncipe**
  - ethnobotany, medicinal plants 4374
  - flora 9910
- **Sap**
  - *Acer saccharum*
    - drought injury, Canada, abscisic acid 278
    - frost injury, Canada, abscisic acid 278
  - allergens, *Ailanthus altissima,* UK 6863
  - *Fagus sylvatica,* Germany, sulfur, distribution, seasonal variation 1134
  - forest trees, groundwater, isotopes, oxygen, South Africa 2832
  - nutrient content, *Picea abies,* cycling, methodology 7648
- **Sap flow**
  - *Acer saccharum,* frost resistance, drought injury, Canada 9676
  - *Betula pubescens,* coppicing, cytokinins, growth 3804
  - broadleaves
    - Australia, measurement 6300
    - Panama, equipment 6298
    - seedlings, measurement 3618
  - cavitation, theory 7065
  - *Chamaecyparis obtusa,* velocity, measurement, techniques 4187
  - conifers, transpiration, Sweden 7061
  - *Eucalyptus grandis,* measurement, techniques 308
  - *Eucalyptus populnea,* transpiration, Australia, measurement 6813
  - *Liquidambar formosana,* translocation, water stress 4507
- **Sap flow** *cont.*
  - *Pinus halepensis,* water stress, transpiration, Israel 7947
  - *Pinus sylvestris,* resin tapping, Germany 7067
  - *Quercus,* water uptake, measurement 4523
  - *Quercus petraea,* thinning, France, effects 7066
  - *Salix viminalis,* plant water relations, Sweden 8811-8812
  - trees, measurement, techniques, theory 3601
- ***Saperda inornata,*** insect pests, *Populus tremuloides,* USA, disease vectors 10011
- **Sapindaceae,** wood anatomy, China 8069
- ***Sapindus mukorossi***
  - fungal diseases, Pakistan, seeds 2257
  - seed germination, seed treatment, temperature 81
  - seed oils, chemistry 2975
- ***Sapindus saponaria,*** fruits, medicinal plants, Brazil, saponins 9798
- ***Sapium sebiferum***
  - seedlings, salt tolerance, flooding tolerance 6293
  - woody weeds, biomass production, controlled burning, USA 2696
- **Saprophytes,** coniferous forests, Norway, relationships, layer structure 9990
- **Sapwood**
  - *Cryptomeria japonica,* heartwood, Taiwan, formation 6395
  - *Picea abies,* increment, diameter, age of trees, Estonia 1183
  - *Pinus sylvestris*
    - foliage, plant water relations, climate, Europe 5284
    - triacylglycerols, sterol esters 2984
- ***Saraca indica,*** medicinal plants, antiviral properties 8688
- **Sarawak**
  - *Alangium,* taxonomy 7229
  - Burseraceae, taxonomy 7226
  - ethnobotany, rain forests 9555
  - forest management, sustainability, logging, mountain forests 6988
  - *Gnetum,* pollination 8951
  - *Kokoona,* taxonomy 7227
  - mangrove forests, valuation 3086
  - medicinal plants, surveys, ethnobotany 2675
  - *Microtropis,* taxonomy 7227
  - *Shorea albida,* shoot cuttings 5074
  - swamps, natural regeneration, seedbeds, pneumatophores 7331
  - wildlife, frogs, rain forests 9222
- ***Sarcolaena isaloensis,*** taxonomy, Madagascar 493
- **Sardinia**
  - edible fungi
    - *Tuber*
      - forest plantations 6158
      - *Quercus suber* 207
  - *Quercus suber,* grafting, techniques 6066
- ***Sarsina violascens,*** insect pests, *Eucalyptus,* Brazil 3181
- ***Sarucallis kahawaluokalani,*** insect pests, *Lagerstroemia indica,* USA, control 2375
- ***Sasa kurilensis,*** control, bamboos, *Fagus crenata,* natural regeneration, Japan 4346
- ***Sasa nipponica,*** humus, formation, volcanic soils, Japan 5261
- ***Sasa palmata,*** understorey, *Fagus crenata,* Japan, bamboos 3117
- ***Sasa senanensis,*** plant succession, old fields, understorey, species diversity, Japan 5463
- ***Sassafras albidum***
  - control, woody weeds, herbicides, USA 1767
  - foliage, stand characteristics, browse, nutritive value 3196
- **Saudi Arabia**
  - deciduous forests, synecology, geographical distribution 1360
  - mangroves, *Avicennia marina,* foliage, heavy metals 2980

- **Saudi Arabia** *cont.*
  - medicinal plants, books 3295
  - multipurpose trees, species trials, shelterbelts, irrigation, saline water 2559
  - *Prosopis juliflora,* afforestation, sandy soils 1536
  - vegetation types 4777
    - synecology, soil properties, deserts 8162
- ***Saurauia,*** reproductive behaviour, pollen 1316
- ***Saurauia napaulensis,*** fodder, choice of species, Nepal 6948
- ***Saurauia tristyla,*** wood anatomy, rays 2029
- **Saururaceae,** wood anatomy, phylogeny 8073
- ***Saururus cernuus,*** wood anatomy, phylogeny 8073
- **Savanna** (*see* Vegetation types, savannas)
- **Saws**
  - chainsaws
    - health
      - petroleum hydrocarbons 6007
      - sawdust 6007
    - vibration 189, 961
- ***Saxegothaea conspicua***
  - deforestation, nature conservation, Chile 3253
  - foliage, frost resistance, Chile, lipids 274
  - rain forests, seed size, recruitment, Chile 7258
- **Scandinavia**
  - *Betula pubescens,* treelines, distribution 7263
  - boreal forests
    - forest management, sustainability, international cooperation 9941
    - nature conservation, biodiversity, forest management 3278
  - forest nurseries, growing media, container grown plants 9472
  - forest trees, treelines, grazing, climate 7277
  - insect pests, *Betula,* host parasite relationships, theory 4029
  - *Picea abies,* treelines, distribution 7263
- **Scarifiers**
  - site preparation, Sweden, work study 9551
  - Sweden 188
- ***Schedorhinotermes malaccensis,*** insect pests, *Eucalyptus urophylla,* Indonesia, chemical control 1502
- ***Scheelea zonensis,*** seed predation, Panama, rodents 6509
- ***Schefflera,*** wood anatomy 8068
- ***Schefflera arboricola,*** photosynthesis, photoinhibition, stress, measurement 7197
- ***Schefflera digitata,*** mixed forests, seed dispersal, New Zealand 487
- ***Scheffleropsis hemiepiphytica,*** wood anatomy 8068
- ***Schima superba,*** air pollution, sulfur dioxide, Taiwan, seedling growth, physiology 7997
- ***Schima wallichii***
  - species trials, firebreaks, Indonesia 2000
  - stand characteristics, stand structure, biomass production, India 1410
  - tropical forests, synecology, ground vegetation, biomass production, India 9933
- ***Schinopsis balansae***
  - heartwood
    - formation, tannins 2015
    - wood chemistry, extractives 6459
  - wood chemistry, tannins 6447
- ***Schinopsis haenkeana,*** mountain forests, synecology, Argentina 2148
- ***Schinopsis quebracho-colorado,*** old-growth forests, forest borders, Argentina, stand structure 7271
- ***Schinus molle,*** fungal diseases, Pakistan, seeds 2257
- ***Schisandra,*** taxonomy 8978
- ***Schizolachnus pineti,*** insect pests, *Pinus sylvestris,* air pollution, ozone, plant composition 4035
- ***Schizolobium amazonicum,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Schizolobium parahybum***
  - rain forests, Mexico, wood anatomy 1211
  - seeds, enzymes, inhibitors 9829
  - shoot cuttings, Colombia 879
- ***Schizomeria serrata,*** wood anatomy 414
- ***Schizomyia phillyreae,*** insect pests, *Phillyrea angustifolia,* reproductive behaviour, sex, Spain 4735
- ***Schlechtendalia chinensis,*** insects, *Rhus chinensis,* galls, China, biology 9132
- ***Schleichera oleosa***
  - seed oils, chemistry 2975
  - silviculture, India 958
- ***Schleichera trijuga,*** silviculture, India 958
- ***Schueziella fagicola,*** insect pests, *Fagus sylvatica,* galls 7494
- ***Schueziella quercicola,*** insect pests, *Quercus robur,* galls, Germany 7494
- ***Sciadopitys verticillata,*** mycorrhizas, roots 8282
- ***Scirrhia acicola*** (*see Mycosphaerella dearnessii)*
- ***Scirrhia pini*** (*see Mycosphaerella pini)*
- ***Sciurus aberti***
  - squirrels
    - *Pinus ponderosa*
      - cones, USA 8359
      - USA
        - damage 432
        - feeding behaviour 6672
        - nesting 5821
- ***Sciurus carolinensis,*** squirrels, forest trees, UK, competitive ability 2389
- ***Sciurus granatensis,*** squirrels, seed predation, *Scheelea zonensis,* Panama 6509
- ***Sciurus ingrami,*** squirrels, seed predation, Brazil 10067
- ***Sciurus vulgaris***
  - squirrels
    - coniferous forests, fragmentation, ecology, Sweden 2390
    - forest trees, UK, competitive ability 2389
    - UK, feeding behaviour 2391
    - woodlands, fragmentation, Netherlands 6693
- ***Sclerocarya birrea,*** shoots, development, plant growth regulators, gibberellic acid 8923
- ***Sclerocystis***
  - mycorrhizas
    - Fabaceae, India, surveys 3152
    - rhizosphere, India 3157
- ***Sclerocystis rubiformis***
  - mycorrhizas
    - *Casuarina equisetifolia,* seedling growth, India 3153
    - *Leucaena leucocephala,* seedling growth 1442
- ***Scleroderma,*** mycorrhizas, broadleaves 5610
- ***Scleroderma columnara,*** mycorrhizas, Dipterocarpaceae, nutrient uptake, seedlings 1448
- ***Scleroderris lagerbergii*** (*see Gremmeniella abietina)*
- ***Scleronema micranthum,*** plant physiology, water use efficiency, border effects 3790
- ***Scolopia crassipes,*** foliage, Sri Lanka, chemical composition 3751
- **Scolytidae**
  - insect pests
    - Germany, trapping, nontarget effects 2356
    - *Lindera triloba,* Japan, fungal diseases, symbiosis 4887
    - *Pinus sylvestris,* Norway, distribution 2350
    - population structure 10033
- ***Scolytoplatypus mikado,*** insect pests, *Lindera triloba,* Japan, symbionts 8339
- ***Scolytus jaroshevskii,*** insect pests, *Elaeagnus,* Russia, disease vectors 10017
- ***Scolytus laevis,*** insect pests, *Ulmus glabra,* Norway, disease vectors 2346
- ***Scolytus multistriatus***
  - insect pests
    - *Ulmus,* UK, disease vectors 5633
    - *Ulmus minor,* Uzbekistan, control 657
- ***Scolytus scolytus,*** insect pests, *Ulmus,* UK, disease vectors 5633
- **Scrub** (*see* Vegetation types, scrub)
- ***Scurrula cordifolia,*** mistletoes, forest trees, India 6642
- ***Scurrula pulverulenta,*** mistletoes, forest trees, India 6642
- ***Scutellospora,*** mycorrhizas, Fabaceae, India, surveys 3152
- ***Scutellospora calospora,*** mycorrhizas, *Calamus manan,* planting stock, Malaysia 975
- **Seasonal variation**
  - *Pinus sylvestris,* biomass distribution, root shoot ratio 5183
  - *Populus* 'Robusta', shoots, proteins, messenger RNA 1251
- **Seasonality**
  - deciduous forests, phenology, reproductive behaviour, Temperate Zones 8126
  - phenology, forest trees, conferences 7639
  - tropical forests, phenology, foliage, climatic change 8043
- **Seed aging,** *Pinus sylvestris,* genetic variation, testing 2564
- **Seed anatomy**
  - *Cercis canadensis,* dormancy 6396
  - *Protorhus namaquensis,* taxonomy, South Africa 3848
- **Seed banks**
  - *Acacia,* Africa South of Sahara 3962
  - broadleaves
    - Australia 7324
    - deciduous forests, natural regeneration, Canada 3119
  - *Fagus sylvatica,* natural regeneration, site preparation, Denmark 7773
  - forest ecology, UK 3831
  - methodology 5007
  - old-growth forests, Panama, methodology 6581
  - *Pinus sylvestris,* Russia 9937
  - *Pseudotsuga menziesii,* USA, logging, burning 3056
  - rain forests, Australia 3824
  - seed germination
    - *Eucalyptus marginata,* Australia, environmental factors 6572
    - sclerophyllous forests, *Eucalyptus marginata,* light, Australia 8180
    - viability, woody plants, USA 2097
  - seed predation, *Eucalyptus salmonophloia,* natural regeneration, Australia 8141
  - tropical forests, natural regeneration, Colombia 1314
  - woody weeds, *Mimosa pigra,* Australia 8641
- **Seed cleaners,** design, *Pinus sylvestris* 960
- **Seed collection**
  - *Brosimum alicastrum,* planting stock, establishment, Jamaica 2621
  - chemistry, *Eucalyptus calophylla,* forest soils, mine spoil, Australia 6466
  - economics, *Picea abies,* Russia 854
  - handling, *Azadirachta indica,* Kenya 2571
  - harvesting date, *Picea,* seedling growth, Canada 80
  - seed treatment, seed germination, *Terminalia,* seedling growth, India 2572
  - *Sesbania,* genetic resources, international cooperation, Africa South of Sahara 3136
  - *Sesbania keniensis,* Kenya 3993
  - *Sesbania sesban,* Kenya 3993
- **Seed cones,** *Picea mariana,* Canada, equations 9347
- **Seed crops,** *Trichilia,* rural economy, Zimbabwe 195
- **Seed development**
  - *Cercis siliquastrum*
    - biochemistry 6421
    - ultrastructure 2055
  - *Ozoroa paniculosa* 3720

Seed development *cont.*
- *Pinus taeda,* enzymes, isocitrate lyase 6471
- position effect, *Erythrina suberosa,* India 2944
- seed germination, conferences 7641
- seed production, *Larix occidentalis,* pollination 1319

Seed dispersal
- *Acacia terminalis,* Formicidae, Australia 484
- birds
  - *Cornus peruviana,* geographical distribution, Colombia 1327
  - *Garrulus glandarius, Quercus,* Germany 1307
  - *Nucifraga caryocatactes,* conifers, Germany 1307
  - *Phillyrea latifolia,* Spain 477
  - *Pinus jeffreyi,* USA 693
  - *Quercus ilex,* vegetation types, plant succession, France 3092
  - reviews 1307
  - tropical forests, Indonesia 1403
  - *Turdus, Juniperus thurifera,* Spain 2387
- bottomland forests, Brazil 3035
- *Castanopsis cuspidata,* stand characteristics, Japan 9960
- *Cecropia obtusifolia,* Mexico, opossums 6506
- Chiroptera
  - Pteropodidae, *Ficus chrysolepis,* Philippines 686
  - tropical forests, Indonesia 1403
- *Cupressus sempervirens,* cones, longevity, Israel 5421
- forest fragmentation, simulation 9886
- forest trees, land use, global warming, simulation 480
- mammals, *Apodemus sylvaticus, Juniperus thurifera,* Spain 2387
- mangroves, *Avicennia marina,* reproductive behaviour, Australia 3041
- mistletoes, Loranthaceae, forests, Colombia 1469
- mixed forests, fruits, New Zealand 486
- monkeys
  - *Alouatta seniculus, Chrysophyllum lucentifolium,* French Guiana, interactions 7541
  - *Cercopithecus aethiops,* forests, reclamation, South Africa 3211
- *Prunus mahaleb,* birds, Spain, ecology, species diversity 9204
- rain forests, phenology, Mexico 473
- rodents, *Pinus jeffreyi,* USA 691, 693
- seed germination
  - *Ficus luschnathiana*
    - bats, Brazil 9881
    - birds, Brazil 9881
- seed size, *Pinus* 8125
- shrubs, Formicidae, Italy 3830
- stand characteristics, recruitment 9022
- *Tachigali versicolor,* seedlings, recruitment, Panama 483
- tropical forests, wind damage, Puerto Rico 1335
- turtles, *Rhinoclemmys,* vegetation types, Costa Rica 6515
- ungulates, seed predation, tropical forests, Peru 685
- *Vouacapoua americana,* recruitment, soil water regimes, French Guiana 6571
- wildlife
  - tropical forests
    - reviews 3868
    - Uganda 8953
- wind
  - conifers, seed germination 479
  - landslides, natural regeneration, altitude, Japan 3226

Seed dormancy
- *Acer rubrum,* genetic variation, USA 7725
- Fabaceae, Arid Regions 7323
- *Phellodendron wilsonii,* germination, composition, abscisic acid 2563
- *Pinus taeda,* seed stratification, biochemistry, protein synthesis 2576

Seed dormancy *cont.*
- seed treatment, *Fraxinus excelsior,* Poland 6875
- temperature, moisture, shrubs, Mexico 2575

Seed germination
- *Acacia*
  - fumigants, phostoxin, phytotoxicity 5781
  - species trials, provenance trials, India 8564
- *Acacia senegal,* seed treatment 9436
- *Adenanthera pavonina* 1683
- *Albizia,* fruits, morphology, seeds, morphology 6075
- *Albizia lebbeck,* seedling growth, copper, iron, soil pollution 304
- *Albizia procera,* irrigation, distillery effluent, India 6879
- anatomy, *Araucaria bidwillii* 2935
- bamboos
  - *Dendrocalamus strictus,* plant growth regulators 3380
  - *Thyrsostachys siamensis,* plant growth regulators 3380
- *Betula pendula,* ionizing radiation, damage, Ukraine 7979
- broadleaves
  - Korea Republic 8573
  - temperature 76
- *Cassia sieberiana,* seed treatment 84
- *Cistus,* forest fires, wood ash, seedling growth 382
- conifers
  - Canada, stratification, light 4270
  - seed dispersal, wind 479
  - seed treatment 3387
    - dormancy breaking, techniques 1684
  - water stress 9426
- *Dalbergia sissoo*
  - fumigants, phostoxin, phytotoxicity 5781
  - irradiation, growing media, seedling growth 582
  - seedling growth, India 840
  - seedlings, survival, India 2573
- *Dichrostachys cinerea* 86
- *Dryobalanops aromatica,* growing media, Peninsular Malaysia 7730
- ecology, *Ficus carica* 3375
- embryonic development, seed longevity, *Araucaria hunsteinii,* storage 9431
- *Eremophila,* reclamation, Australia 4264
- *Erythrina caffra,* temperature 9435
- *Eucalyptus,* salt tolerance, seedling growth 5413
- *Eucalyptus deglupta,* liquid fertilizers, Indonesia 859
- *Eucalyptus regnans,* soil pH, controlled burning, Australia 5365
- fungal diseases, damping off, *Pinus,* seedling growth, acid deposition 10004
- *Gmelina arborea,* fruits, colour, treatment 861
- *Guilfoylia monostylis,* temperature 9435
- *Holoptelea integrifolia* 843
- inhibition, testas, extracts, glucose, *Acer saccharinum* 844
- *Larix,* hybrids, seedling growth, USA 1432
- *Larix sibirica,* genetic variation 8202
- *Leucaena leucocephala,* variety trials, direct sowing, Cuba, growth 6872
- *Metrosideros polymorpha* 1311
- moisture content, storage, *Virola surinamensis* 8569
- *Muntingia calabura,* plant growth regulators, temperature, light 9440
- *Nothofagus,* vegetative propagation, Chile 6086
- *Paraserianthes falcataria,* fruits, morphology, seeds, morphology 6075
- *Picea abies*
  - air pollution, chromosome aberrations, Slovenia 5335
  - inhibitors 446
  - temperature 9427
- *Picea mariana,* roots, hypocotyls 9434

Seed germination *cont.*
- *Pinus*
  - fire ecology, Mediterranean Region 8947
  - forest fires
    - Spain 5364
    - temperature, simulation 9774
- *Pinus banksiana,* radionuclides, Canada 2861
- *Pinus cembra*
  - seeds
    - drying 4267
    - storage 4267
- *Pinus halepensis,* forest fires, wood ash, seedling growth 382
- *Pinus patula,* seed moisture, seedling growth, light, temperature 78
- *Pinus peuce,* seedling growth, plant nutrition, forest nurseries, UK 9469
- *Pinus pinaster,* water stress, provenance 9720
- *Pinus resinosa,* forest fires, seedling growth, Canada 3866
- *Pinus rigida,* cones, processing, USA 8572
- *Pinus roxburghii,* fumigants, phostoxin, phytotoxicity 5781
- *Pinus sylvestris*
  - enzymes, isoenzymes, superoxide dismutase 6480
  - ground vegetation, allelopathy, natural regeneration, Sweden 9913
  - seedling growth, allelopathy, plant extracts, *Pteridium aquilinum* 5464
- *Pinus thunbergii,* molecular genetics 3130
- *Piper auritum,* light, Mexico 3549
- *Populus nigra,* bottomland forests, natural regeneration, Netherlands 9963
- *Populus tremula,* seedling growth, allelopathy, plant extracts, *Pteridium aquilinum* 5464
- *Prosopis juliflora,* salt tolerance, plant growth regulators 6035
- *Pseudotsuga menziesii,* pollen, storage, physiology 2103
- Puerto Rico 3383
- *Quercus robur,* plant physiology 3012
- root nodules
  - *Rhizobium*
    - *Acacia auriculiformis,* seedling growth 8255
    - *Acacia catechu,* seedling growth 8255
    - *Dalbergia sissoo,* seedling growth 8255
- *Salix,* bottomland forests, natural regeneration, Netherlands 9963
- sclerophyllous scrub, forest fires, soil temperature, Australia 8036
- seed dormancy, electron transfer, redox reactions, *Paulownia tomentosa* 855
- seed size, chemistry, *Inga,* water stress 8818
- seed treatment
  - *Abies procera* 73
  - *Acacia* 2561
  - *Acacia auriculiformis* 1681
  - *Azadirachta indica,* seedling growth 71
  - broadleaves 2562
  - *Caesalpinia pulcherrima* 2568
  - *Cornus mas,* Poland 857
  - *Larix occidentalis* 848
  - *Litsea lanuginosa,* India 9433
  - multipurpose trees 85
    - India 858
  - *Ostrya carpinifolia,* Poland 856
  - *Paulownia* 8570
  - *Pinus sylvestris,* seedling growth 852
  - *Prosopis* 72
  - *Prosopis cineraria,* planting, soil properties, India 4336
  - *Pseudotsuga menziesii,* photoperiodism 6878
  - *Santalum acuminatum* 6034
  - seed dormancy
    - *Albizia procera* 7729
    - *Paraserianthes falcataria* 7729
  - sowing, *Bixa orellana* 9425

- **Seed germination** *cont.*
  - seed treatment *cont.*
    - storage
      - *Acer* 850
      - *Fraxinus excelsior* 845, 851
      - *Malus sylvestris,* Poland 849
      - *Pyrus communis,* Poland 849
    - stratification, *Pittosporum* 4271
    - temperature
      - broadleaves 81
      - *Fraxinus* 9439
  - seedling growth, broadleaves, soil chemistry, carbon, Zambia 5239
  - *Shorea macroptera,* growing media, Peninsular Malaysia 7730
  - *Sophora japonica* 838
  - storage
    - *Ostrya carpinifolia* 6874
    - *Populus ciliata,* India 9432
    - seed moisture, *Toona ciliata* 83
    - *Tectona grandis,* provenance, India 6036
  - stratification, temperature, forest trees, testing, viability 7728
  - *Tectona grandis,* diameter, fruits, India 846
  - viability, broadleaves, natural regeneration, UK 4750
- **Seed inoculation,** *Rhizobium, Acacia holosericea,* seed treatment, seedling growth 1682
- **Seed longevity,** storage, forest trees 3381
- **Seed maturation**
  - broadleaves, Korea Republic 8573
  - seed collection, *Pinus sylvestris,* Sweden, radiography 3382
  - seed morphology, chemistry, *Chamaecyparis nootkatensis,* embryos 1220
  - seed treatment, *Pinus sylvestris,* Sweden 6037
- **Seed moisture,** *Pinus patula,* seed germination, seedling growth, light, temperature 78
- **Seed morphology**
  - *Pinus sylvestris,* seeds, imbibition, provenance, Finland 6400
  - rain forests, phenology, Mexico 473
  - testas
    - imbibition, *Picea abies* 8896
    - *Paulownia* 3721
- **Seed oils**
  - chemistry
    - *Leucaena leucocephala* 2975
    - *Sapindus mukorossi* 2975
    - *Schleichera oleosa* 2975
  - properties, *Annona squamosa* 7172
- **Seed orchards**
  - *Bombacopsis quinata,* pollination, Colombia 1685
  - clones, *Picea abies,* genetic variation, pollination, Sweden 9969
  - cones, techniques, reviews 9428
  - conifers
    - branches, pruning, reviews 9528
    - crown, pruning, reviews 9528
    - flowering, induction, Germany 6511
    - pollination, Canada, methodology 9873
  - establishment
    - *Tectona grandis*
      - grafting, India 6043
      - tree breeding, budding, Peninsular Malaysia 7742
  - flowering, techniques, reviews 9428
  - genetic improvement, management, reviews 9430
  - insect pests
    - conifers, Canada, pest management 6667
    - *Pinus,* USA, control 4045
  - *Juglans nigra,* genetic variation, isoenzymes, USA 5540
  - *Larix,* hybrids, Finland 3976
  - *Larix laricina,* pollen, contamination, Canada 4269
  - management, *Bombacopsis quinata,* Colombia 2200
  - *Picea abies*
    - grafting
      - flowering, clonal variation, Poland 841
- **Seed orchards** *cont.*
  - *Picea abies cont.*
    - grafting *cont.*
      - mortality, clonal variation, Poland 841
    - reproductive behaviour
      - climatic factors, cold resistance, Norway 9878
      - root pruning, plant growth regulators, Sweden 3828
  - *Picea glauca,* pollination, population genetics, Canada 564
  - *Picea mariana,* pollen, seasonal variation, Canada 5423
  - *Picea sitchensis*
    - genetic diversity, Canada 3982
    - reproductive behaviour, Canada, estimation 4266
  - *Pinus sylvestris*
    - fertilizers, flowering, seed production, Finland 5063
    - genetic variation, isoenzymes, population genetics, Poland 1426
    - latitude, Finland 7731
    - pollination
      - Sweden 3134
        - management 9875
      - tree breeding, Sweden 5500
  - *Pinus taeda*
    - flowering, USA, variation 9877
    - plant composition, USA, variation 9877
  - pollen, techniques, reviews 9428
  - *Prunus avium,* selection criteria, France 5521
  - *Pseudotsuga menziesii*
    - genetic diversity, Canada 5065
    - mating systems
      - genetic variation, France 9038
      - pollen, France, dispersal 9039
    - pollination, contamination, Canada 4813
    - spacing, USA 4265
  - seed production, *Pinus elliottii,* USA 3377
  - *Tectona grandis,* agroforestry, weed control, India 1554
  - tree breeding
    - computer techniques, experimental design 556
    - genetic improvement, genetic erosion 9966
    - genetic variation, simulation 555
- **Seed predation**
  - *Acacia,* savannas, South Africa, rodents 4068
  - birds, *Pionus maximiliani,* Brazil 1518
  - broadleaves, natural regeneration, seed production, UK 3031
  - *Brosimum alicastrum,* synecology, species diversity, recruitment, Mexico 1406
  - *Fagus crenata,* phenology, Japan, meteorological factors 9879
  - monkeys, *Cebus apella, Cariniana micrantha,* Brazil 474
  - *Normanbya normanbyi,* Australia 6513
  - *Quercus robur,* seed production, natural regeneration, recruitment, UK 9023
  - *Scheelea zonensis,* Panama, rodents 6509
  - squirrels, *Sciurus ingrami,* Brazil 10067
  - ungulates, seed dispersal, tropical forests, Peru 685
- **Seed production**
  - *Abies fraseri,* Christmas trees 6144
  - *Aesculus turbinata,* physiology, costs 9868
  - *Betula pendula,* flowering, increment 7727
  - broadleaves, natural regeneration, seed predation, UK 3031
  - *Cercidium,* USA 7214
  - *Fagus crenata,* phenology, Japan, meteorological factors 9879
  - *Fagus sylvatica,* seed quality, stand age, Germany 2567
  - forest trees, estimation, analysis 3845
  - micropropagation, grafts, seedlings, *Betula pendula* 7726
  - monkeys, *Macaca fuscata,* broadleaves, Japan 689
- **Seed production** *cont.*
  - *Picea abies,* seed set, abortion 3378
  - *Pinus,* Mexico 6876
  - *Pinus sylvestris*
    - plant growth regulators, Russia 2073
    - seed orchards, fertilizers, flowering, Finland 5063
  - *Quercus*
    - reproductive behaviour, USA, variation 4733
    - USA, measurement, methodology 4190
  - *Quercus robur,* predation, natural regeneration, recruitment, UK 9023
  - reproductive behaviour, reviews 9429
  - seed dispersal, seed predation, mixed forests, New Zealand 487
  - seed germination
    - *Cassia siamea,* India 4268
    - *Leucaena leucocephala,* India 4268
  - seed quality, *Fagus crenata,* Japan, variation 7213
- **Seed quality**
  - *Fagus crenata,* phenology, Japan, meteorological factors 9879
  - *Fagus sylvatica,* seed production, stand age, Germany 2567
  - *Tectona grandis,* flowering, India 482
- **Seed set**
  - *Abies alba,* air pollution, Slovakia 488
  - abortion, *Picea abies,* seed production 3378
  - *Acacia,* Senegal 3842
  - *Ginkgo biloba,* China 7215
  - *Pseudotsuga menziesii,* pollination 8128
- **Seed size**
  - habit, Australia 2938
  - multipurpose trees, ultisols, fertilizers, pot experimentation 7758
  - rain forests, forest trees, recruitment, Chile 7258
  - vegetation types, light relations, Singapore 9882
- **Seed stratification,** *Pinus taeda,* seed dormancy, biochemistry, protein synthesis 2576
- **Seed testing**
  - *Pinus roxburghii,* radiography, techniques 2488
  - viability
    - *Acacia concinna* 1677
    - forest trees, seed germination, stratification, temperature 7728
- **Seed treatment**
  - *Acacia holosericea,* seed inoculation, *Rhizobium,* seedling growth 1682
  - *Acer saccharum,* dormancy, protein synthesis 9437
  - *Cassia sieberiana,* seed germination 84
  - conifers
    - seed germination 3387
      - dormancy breaking, techniques 1684
  - dormancy breaking, chilling, conifers, techniques 3384
  - forest trees, seedlings, photosynthesis 5064
  - fungicides, *Pinus nigra,* Italy 1467
  - *Pinus strobus,* chemistry, messenger RNA, proteins 74
  - *Pinus sylvestris,* lasers 853
  - seed dormancy, *Cinnamomum camphora* 3379
  - seed germination, *Cassia fistula,* seedling growth 2560
  - temperature, seed germination, Fabaceae 2570
- **Seed trees,** *Pinus strobus,* natural regeneration, stand characteristics, USA 3094
- **Seed weight**
  - nutrients
    - *Pongamia pinnata,* seedling growth 9438
    - *Tamarindus indica,* seedling growth 9438
  - Puerto Rico 3383
  - seed germination
    - *Celtis australis,* seedling growth, nitrogen fertilizers, India 141
    - *Pinus caribaea,* seedling growth, genetic variation 75

- **Seed weight** *cont.*
  - seed germination *cont.*
    - *Santalum album,* India 1679
    - seedling growth, *Santalum album,* Indonesia 6039
- **Seed years** (*see* Seeds, periodicity)
- **Seedbeds**
  - *Picea mariana*
    - direct sowing
      - Canada 4332
      - site factors, Canada 4330
- **Seedling emergence,** *Pinus sylvestris,* direct sowing, soil water, site preparation, Sweden 6111
- **Seedling growth**
  - *Acacia*
    - forest nurseries, irrigation, Jordan 7767
    - woody weeds, soil fertility, South Africa 2646
  - *Acacia holosericea,* seed treatment, seed inoculation, *Rhizobium* 1682
  - *Acacia mangium*
    - nitrogen fixation, plant nutrition, phosphorus, provenance 6313
    - plant water relations, plant growth regulators 445
  - *Acer,* irrigation 6929
  - *Albizia lebbeck,* seed germination, copper, iron, soil pollution 304
  - *Alnus rubra,* photosynthesis, nitrogen fixation, temperature, plant water relations 1294
  - *Anadenanthera macrocarpa,* plant water relations, water stress 1111
  - *Azadirachta indica,* seed germination, seed treatment 71
  - *Bactris gasipaes,* soil chemistry, phosphorus 2250
  - bamboos, *Bambusa arundinacea,* seeds, irradiation, seed germination 70
  - *Betula pendula*
    - carbon dioxide enrichment, temperature, photosynthesis, transpiration 2997
    - fertilizers
      - ash, Finland 898
      - paper mill sludge, Finland 898
    - soil toxicity, cadmium, plant nutrition 4501
    - weed control, Finland 3450
  - biomass distribution
    - *Betula alleghaniensis,* plant nutrition 6426
    - *Betula populifolia,* plant nutrition 6426
  - broadleaves
    - browsing damage, light, USA 1520
    - plant nutrition
      - nitrogen, enzymes 5289
      - nutrient availability 6309
    - root zone temperature 6275
    - tree guards, Australia 5129
  - *Calliandra calothyrsus,* root nodules, development, temperature 6621
  - carbon dioxide enrichment, air pollution, ozone 2874
  - *Cassia fistula,* seed treatment, seed germination 2560
  - *Celtis australis,* seed weight, nitrogen fertilizers, India 141
  - *Cistus,* forest fires, wood ash, seed germination 382
  - conifers
    - forest nurseries, Canada, container grown plants 8595
    - herbicide resistance, bilanafos, plant morphology 5137
    - plant nutrition, nitrogen, mathematics 7078
  - *Dalbergia sissoo*
    - irradiation, growing media, seed germination 582
    - seed germination, India 840
  - *Eucalyptus*
    - salt tolerance, seed germination 5413
    - waterlogging, salt tolerance, plant water relations, foliage 1115
  - *Eucalyptus grandis*
    - plant nutrition, nitrogen, phosphorus, simulation 32

- **Seedling growth** *cont.*
  - *Eucalyptus grandis cont.*
    - soil compaction 6277
  - *Eucalyptus tereticornis,* NPK fertilizers, pot experimentation 3417
  - *Eucalyptus viminalis,* soil water regimes, water uptake, pot experimentation 3595
  - Fabaceae, root nodules, nitrogen fertilizers 5288
  - forest trees
    - fertilizers
      - mulching, Canada 6116
      - sodium humate 8589
    - photosynthesis, foliage, India 1261
  - fungal diseases, damping off, *Pinus,* seed germination, acid deposition 10004
  - *Gmelina arborea,* wood density, nitrogen-phosphorus fertilizers, latosols 134
  - growth models, *Prunus serotina,* air pollution, ozone, USA 9744
  - *Kandelia candel*
    - salt tolerance 4540
      - plant nutrition, copper, zinc 4539
  - *Larix,* hybrids, seed germination, USA 1432
  - *Leucaena,* hybrids 7168
  - *Leucaena leucocephala,* phosphorus fertilizers, sulfur fertilizers 4298
  - mangroves
    - *Avicennia marina,* plant growth regulators, plant physiology 4699
    - nutrient availability, light intensity 5386
  - mortality, *Pseudotsuga menziesii,* site preparation, pesticides, USA 3589
  - mycorrhizas
    - *Acaulospora, Cordia alliodora* 1444
    - *Acaulospora laevis, Leucaena leucocephala* 1442
    - *Casuarina equisetifolia* 4851
    - *Entrophospora colombiana, Cordia alliodora* 1444
    - *Gigaspora margarita, Leucaena leucocephala* 1442
    - *Glomus*
      - *Cordia alliodora* 1444
      - Fabaceae, India 3153
      - *Leucaena leucocephala* 1442
      - *Pithecellobium dulce* 2239
    - *Glomus aggregatum, Bactris gasipaes* 2250
    - *Laccaria fraterna, Acacia nilotica* 8267
    - *Leucaena leucocephala*
      - photosynthesis 596
      - plant nutrition 596
      - plant water relations 596
    - *Pisolithus tinctorius, Acacia nilotica* 8267
    - *Sclerocystis rubiformis*
      - *Casuarina equisetifolia,* India 3153
      - *Leucaena leucocephala* 1442
  - *Parkinsonia aculeata,* plant water relations, water stress, root shoot ratio 1112
  - patterns, *Pinus pinaster,* photoperiod, temperature, tree breeding 6429
  - *Picea*
    - planting stock, Canada, damage 905
    - seed collection, harvesting date, Canada 80
  - *Picea abies*
    - carbon dioxide enrichment, temperature, photosynthesis, transpiration 2997
    - phenology, genetic variation, photoperiodism, temperature 8040
  - *Picea glauca* × *Picea engelmannii,* bacteria, Canada 7926
  - *Picea mariana*
    - climatic change, plant nutrition, nitrogen, genetic variation 9666
    - genetic variation, phenology, Canada 3980
    - plant competition, light, Canada 3880
    - provenance trials, phenology 3374

- **Seedling growth** *cont.*
  - *Picea rubens*
    - photosynthesis, carbon dioxide enrichment, plant water relations, soil fertility 1293
    - plant nutrition, aluminium, toxicity, gas exchange 8819
  - *Picea sitchensis,* carbon dioxide enrichment, plant water relations, water stress, plant nutrition 8106
  - *Pinus caribaea*
    - plant nutrition, boron, copper, plant composition 316
    - seed weight, seed germination, genetic variation 75
  - *Pinus contorta,* genetic variation, heritability, Canada 5479
  - *Pinus halepensis,* forest fires, wood ash, seed germination 382
  - *Pinus patula,* seed germination, seed moisture, light, temperature 78
  - *Pinus peuce,* seed germination, plant nutrition, forest nurseries, UK 9469
  - *Pinus ponderosa*
    - carbon dioxide enrichment, nutrient deficiencies, nitrogen 7967
    - gas exchange, carbon dioxide enrichment, temperature 3552
    - nitrogen fertilizers, mineralization, pot experimentation 7662
  - *Pinus radiata*
    - genetic variation, stem form, New Zealand 4819
    - weeds, plant competition, New Zealand 4342
  - *Pinus resinosa,* forest fires, seed germination, Canada 3866
  - *Pinus sylvestris*
    - photoperiodism, genetic variation 3972
    - plant growth regulators 1269
    - plant nutrition, nitrogen, mycorrhizas, enzymes 1140
    - seed germination
      - allelopathy, plant extracts, *Pteridium aquilinum* 5464
      - seed treatment 852
    - weeds, allelopathy, plant competition, Sweden 1759
  - *Pinus taeda,* acid deposition, air pollution, ozone, soil enzymes 9738
  - *Podocarpus totara,* provenance trials, stem form, New Zealand 69
  - *Pongamia pinnata,* seed weight, nutrients 9438
  - *Populus tremula,* seed germination, allelopathy, plant extracts, *Pteridium aquilinum* 5464
  - *Populus tremuloides,* plant nutrition, nitrogen, air pollution, ozone 9743
  - *Prunus pensylvanica,* plant competition, browsing damage, USA 3878
  - *Pseudotsuga menziesii*
    - plant growth regulators 3794
    - tree breeding, genetic variation, USA 9968
  - *Pterocarpus angolensis*
    - forest nurseries
      - Tanzania
        - artificial regeneration 9479
        - fertilizers 9479
        - natural regeneration 9479
        - roots, pruning 9479
  - *Quercus havardii*
    - soil biology
      - USA
        - Formicidae 5272
        - mycorrhizas 5272
  - *Quercus rubra,* Canada 8899
  - *Rhizophora apiculata,* plant nutrition, potassium 6113
  - root nodules
    - *Bradyrhizobium*
      - *Acacia ampliceps,* salt tolerance, nitrogen fixation 6620
      - *Maackia amurensis* 6608
    - *Frankia, Casuarina cunninghamiana,* soil types, phosphorus fertilizers 6904

Seedling growth *cont.*
  root nodules *cont.*
    Rhizobium
      Acacia ampliceps, salt tolerance, nitrogen fixation 6620
      Acacia auriculiformis, seed germination 8255
      Acacia catechu, seed germination 8255
      Dalbergia sissoo, seed germination 8255
  root systems, *Quercus robur,* planting stock, root pruning 3424
  Salix myrsinifolia, plant nutrition, nitrogen, phenolic compounds 6317
  Santalum album, light, Australia 3535
  Sesbania sesban, root nodules, development, temperature 6621
  street trees, seeds, pollution, vehicles, Pakistan 10155
  survival
    broadleaves, forest nurseries, containers, Bangladesh 6076
    Fagus sylvatica, light, plant water relations 3545
    Populus trichocarpa, genetic variation, USA, stress factors 3996
  Tamarindus indica, seed weight, nutrients 9438
  Terminalia, seed collection, seed treatment, India 2572
  Thuja plicata
    light, Canada 6253
    population genetics, frost resistance, USA 1429
  Tsuga heterophylla, soil bacteria, seed inoculation, seed germination 6085
Seedlings
  Abies fraseri
    air pollution
      ozone
        gas exchange 2888
        growth 2888
  Acacia nilotica, salt tolerance, growth, plant physiology 6469
  Acer pseudoplatanus, plant nutrition, nitrogen 2857
  Acer saccharum, mycorrhizas, soil arthropods, forest litter, pot experimentation 8262
  Alnus japonica, flooding, growth effects 6361
  Alnus rubra, carbon dioxide enrichment, drought 7190
  biomass distribution, *Quercus robur,* soil water 7155
  broadleaves
    nutrient uptake, USA, canopy gaps 1144
    phenology, carbon dioxide enrichment, temperature, soil fertility 7864
    salt tolerance, flooding tolerance 6293
    sap flow, measurement 3618
  carbohydrates, mycorrhizas, *Afzelia africana* 2248
  Carpinus, reproductive behaviour, seeds, Japan, old-growth forests 7211
  Chlorophora excelsa
    photosynthesis, light 3010
    respiration, light 3010
  conifers, light penetration, plant morphology, plant physiology, adaptation 6258
  Dalbergia sissoo, water stress, roots, growth 314
  development, rain forests, allometry, Japan 2943
  Erythrina variegata, flooding, effects, photosynthesis, nitrate reductase 6305
  establishment, *Salix setchelliana,* streams, USA 8173
  Eucalyptus maculata, nutrient deficiencies, symptoms 1146
  Fagus crenata, snow cover, natural regeneration, Japan, vertebrate pests 6252
  Fagus sylvatica, microwave radiation 329
Seedlings *cont.*
  Faidherbia albida, increment, plant morphology, Burkina Faso 6061
  foliage, *Quercus serrata,* plant nutrition, enzymes, plant composition 6316
  forest litter, wind damage, Puerto Rico, botanical composition 1077
  forest trees
    dwarfism, morphogenesis 6397
    frost injury, frost heave, reviews 4482
    frost resistance, simulation 9360
    light, Panama, predation, growth 3100
    ozone, Switzerland 5311
    plant competition, pot experimentation 3867
    water stress
      abscisic acid, plant physiology 3018
      turgor 2845
  fungal diseases
    Cylindrocladium scoparium, Pinus resinosa, biological control 9124
    Pythium irregulare, Pinus patula, South Africa 5622
  Gmelina arborea, wood properties, nitrogen-phosphorus fertilizers, latosols 135
  growth
    Picea abies, frost injury, light, methodology 3315
    Quercus douglasii, roots 3726
  identification, broadleaves, Indonesia 1324
  infection, mycorrhizas, *Pisolithus tinctorius, Pinus* 2247
  Inga, understorey, plant competition, Costa Rica 548
  injuries, *Picea glauca,* boreal forests, artificial regeneration, Canada 9503
  Juglans regia, photosynthesis, carbon cycle 1257
  Larix decidua, photosynthesis, light, enzymes 458
  Larix leptolepis, frost resistance, development, photosynthesis, light 9663
  marsupials, *Wallabia bicolor,* forest trees, browsing damage 5823
  morphology
    broadleaves, photosynthesis, light penetration, Panama 3792
    identification, broadleaves, secondary forests, Peru 6431
  mortality, *Eucalyptus regnans,* soil pH, controlled burning, Australia 5365
  mycorrhizas
    Amanita muscaria, Picea abies, enzymes 7393
    Cenococcum geophilum
      Picea abies, enzymes 7393
      Pinus sylvestris, nitrogen fertilizers 7392
    Laccaria laccata, Picea abies, photosynthesis, seasonal variation 2249
    Lactarius piperatus, Picea abies, photosynthesis, seasonal variation 2249
    physiology, colonization, in vitro 9998
    Pinus nigra, disease resistance 9077
    Pisolithus tinctorius, Picea abies, photosynthesis, seasonal variation 2249
    Suillus collinitus
      Pinus pinaster
        nutrition physiology 8257
        rhizosphere, pH 8257
  Nothofagus solandri, drought injury, site preparation, New Zealand 6297
  phenolic compounds, *Pinus sylvestris,* respiration, phytotoxicity, metal ions 7189
  photosynthesis, forest trees, seed treatment 5064
  Picea, storage, thawing, plant physiology, recovery 6080
  Picea abies
    allelopathy, France 3105
    microwave radiation 329
Seedlings *cont.*
  Picea abies cont.
    photosynthesis, light, enzymes 458
    plant nutrition, soil toxicity, aluminium, calcium 1125
  Picea glauca × Picea engelmannii
    acclimatization, plant composition, proteins 3565
    planting stock
      frost resistance, increment, morphology 1726
      physiology, Canada 1728
      quality 1727
  Picea mariana, drought resistance 3608
  Pinus
    acid deposition, roots, development 7100
    chlorophyll, synthesis, light 1276
  Pinus banksiana
    frost resistance, enzymes, adenosinetriphosphatase 6476
    photosynthesis, plant nutrition, nitrogen 8111
  Pinus edulis, plant composition, starch, metabolism 2088
  Pinus koraiensis, genetic variation, seeds, Korea Republic 8203
  Pinus palustris, forest fires, USA, mortality, stand density 4754
  Pinus pinea
    roots, growth, plant growth regulators, cytokinins 448
    water stress, control, hydrophilic polymers 9718
  Pinus ponderosa
    biosynthesis, alkaloids 9852
    water stress 2828
  Pinus sylvestris
    enzymes, gene expression, light 3973
    phytotoxicity, aluminium, biochemistry 7188
    roots, plant physiology, outplanting 3802
  Pinus taeda, root systems, methodology 9332
  plant succession, canopy gaps, China 1395
  planting, *Picea abies,* mycorrhizas, lime, Sweden 6616
  Populus maximowiczii, stem form, mechanics, Japan 1231
  Prosopis chilensis, water stress, roots, growth 314
  Pseudotsuga menziesii, maturation, measurement, plant morphology 4653
  rain forests, light, canopy, Australia 2798
  recruitment, *Tachigali versicolor,* seed dispersal, Panama 483
  Robinia pseudoacacia
    photosynthesis
      defoliation, shading, branches 2076
      leaf conductance, stomata, diurnal variation 2077
    plant nutrition
      nitrogen
        foliage 2078
        growth 2078
  Salix pentandra, plant growth regulators, gibberellins 3017
  seedling growth
    conifers, plant growth regulators 1268
    Gmelina arborea, fertilizers, wood properties 127
    Mora gonggrijpii, plant water relations, light, Guyana 1222
    Picea abies, plant growth regulators 463
    Pinus sylvestris
      plant growth regulators 463
      plant nutrition, nitrogen, foliage 444
  stress, *Pinus pinaster,* foliage, phenolic acids 6463
  survival
    Dalbergia sissoo, seed germination, India 2573
    environmental factors
      Ceriops tagal, mangrove forests 5128

Seedlings *cont.*
- survival *cont.*
  - environmental factors *cont.*
    - *Rhizophora mucronata*, mangrove forests 5128
- tree breeding, breeding programmes, clones, genetic variance, simulation 9967
- *Trema guineensis*
  - photosynthesis, light 3010
  - respiration, light 3010
- uptake, radionuclides, strontium, *Pinus*, mycorrhizas 4007

Seeds
- *Abies alba*, cones, Romania, production 8949
- *Abies pindrow*, cones, diameter, India 1678
- Acanthaceae, India 503
- accelerated aging, storage, viability, *Acer platanoides*, enzymes 842
- *Acer rubrum*, plant succession, USA 3029
- adaptation, flora, evolution, New Zealand 3826
- *Alnus cordata*, Italy, seed collection, viability, storage 8571
- amino acids
  - *Acacia*, chemotaxonomy, evolution 9979
  - *Caesalpinia*, chemotaxonomy 8971
- anatomy, morphology, germination, *Leucaena leucocephala* 8062
- artificial seeds
  - germination, *Santalum album* 6033
  - *Morus*, tissue culture, techniques 6042
  - *Picea glauca*, tissue culture, somatic embryogenesis 119
- broadleaves
  - books 4151
  - fatty acids, triacylglycerols 2974
- *Carpinus*, reproductive behaviour, seedlings, Japan, old-growth forests 7211
- *Casuarina*, books 2448
- chemistry
  - alpha-amylase, *Araucaria araucana* 2989
  - galactomannans, Fabaceae, taxonomy 7218
  - *Pinus ponderosa*, molecular genetics, phylogeny 440
  - *Xylia xylocarpa*, edible species, India 6946
- colour, seed germination, *Dalbergia sissoo*, India 847
- conifers, immunology, legumin 2969
- *Corylus avellana*, cryopreservation 5102
- *Cycas circinalis*, chemistry, amino acids 8077
- *Dacryodes edulis*, Nigeria, nutritive value 436
- *Dalbergia dolichopetala*, plant growth regulators, gibberellins, metabolism 3756
- damage
  - insect pests
    - *Merobruchus major*, *Pithecellobium ebano*, Mexico 4039
    - *Stator beali*, *Pithecellobium ebano*, Mexico 4039
- desiccation, *Acer saccharinum*, enzymes, phospholipase D 2067
- development, *Pinus taeda*, abscisic acid, embryogenesis 9849
- drying, *Pinus cembra*, seed germination 4267
- embryos, storage, cryopreservation, *Pterocarpus indicus* 6877
- *Enterolobium contortisiliquum*, Brazil, seed treatment, dormancy breaking 8574
- *Erythrina senegalensis*, alkaloids 8911
- Fabaceae
  - Caesalpinioideae, fruits, phylogeny, taxonomy 8977
  - Mimosoideae, fruits, phylogeny, taxonomy 8977

Seeds *cont.*
- *Fagus crenata*, snow cover, natural regeneration, Japan, vertebrate pests 6252
- forest trees
  - biodiversity, conservation, research institutes, Australia 8549
  - fishes 9233
- *Forsythia*, lignans 8909
- fungal diseases
  - *Botryodiplodia theobromae*
    - conifers
      - reviews 603
      - South Africa 603
    - *Pinus elliottii*, USA 4016
  - *Pinus sylvestris*, pathogenicity 9088
- *Ginkgo biloba*
  - plant composition 8674
  - proteins 439
- *Horsfieldia irya*, chemistry 8920
- imbibition
  - *Pinus sylvestris*, seed morphology, provenance, Finland 6400
  - storage, *Acer platanoides*, enzymes, phospholipase D 2067
- insect pests
  - Bruchidae, *Acacia*, seed germination, establishment 6657
  - *Bruchophagus sophorae*, *Sophora japonica*, Slovakia, damage 838
  - *Carmenta foraseminis*, *Gustavia superba*, Panama 7458
  - *Curculio*, *Quercus robur*, Croatia 4891
  - Curculionidae, *Quercus crispula*, Japan, damage 10037
  - Tortricidae, *Quercus crispula*, Japan, damage 10037
- irradiation, seed germination, bamboos, *Bambusa arundinacea*, seedling growth 70
- leaching, *Dalbergia sissoo*, irradiation, seed germination, seedling growth 2569
- *Leucaena leucocephala*
  - chemistry 5398
    - polysaccharides 7175
  - gums, chemistry, rheological properties, edible species 430
- mechanical properties, testing, forest trees 405
- *Melaleuca quinquenervia*, chemotaxonomy, Madagascar 9891
- microbial flora, seed germination, *Prosopis alba*, Argentina 860
- morphology
  - *Albizia*, fruits, morphology, seed germination 6075
  - *Dipterocarpus* 2021
  - *Paraserianthes falcataria*, fruits, morphology, seed germination 6075
- mortality, *Hakea*, fire effects, Australia 2917
- multipurpose trees, training, handbooks 2533-2534
- Myrtaceae, forest fires, Australia, insulation 2100
- oils, *Pithecellobium dulce*, chemistry, fatty acids 8907
- periodicity
  - *Quercus*
    - dendrochronology, Germany 782
    - history, Germany 782
- *Persea thunbergii*, foliage, provenance, Korea Republic, variation 9978
- *Picea*, taxonomy, analysis, proteins 1320
- *Picea abies*, enzymes, properties 6481
- *Pinus cembra*, genetic variation, cones, Romania 9040
- *Pinus cembroides*, genetic variation, Mexico, fatty acids 424
- *Pinus elliottii*, fungal diseases, USA 9089
- *Pinus koraiensis*, genetic variation, seedlings, Korea Republic 8203
- *Pinus strobus*, genetic variation, Canada 8197
- *Pinus sylvestris*
  - genetic variation 8199
  - plant growth regulators 1269
  - plant nutrition, nitrogen, mycorrhizas 2493

Seeds *cont.*
- *Pinus taeda*, enzymes, catalase 8113
- *Pinus thunbergii*, molecular genetics 3130
- production, *Pinus pinea*, edible species, stand characteristics, Portugal 1797
- propagation, *Tilia*, Italy 5062
- proteins, *Cercis siliquastrum*, genetic variation, population genetics 5549
- quality, *Dalbergia sissoo*, progeny testing, India 9064
- recalcitrant seeds
  - *Avicennia marina* 3389
  - broadleaves, chemistry, proteins 3832
  - forest trees, storage, water stress 839
  - mangroves, *Avicennia marina*, seed germination, seed development 3385-3386
  - *Quercus robur*
    - plant physiology 77
    - plant water relations, seed germination 3390
  - seed longevity, sugars 3739
- *Schizolobium parahybum*, enzymes, inhibitors 9829
- sowing, *Juglans regia*, seedlings, morphology 8596
- storage
  - bamboos, India 977
  - cryopreservation, bamboos, *Bambusa arundinacea*, India 2574
  - *Fagus sylvatica* 2566
  - *Pinus cembra*, seed germination 4267
  - *Quercus crispula* 3376
  - seed germination, multipurpose trees, reclamation, India 79
  - seed moisture, drying, temperature, *Fagus sylvatica* 82
  - viability, *Agathis* 6040
- street trees, seedling growth, pollution, vehicles, Pakistan 10155
- survival
  - predation, rain forests, Australia 4050
  - woody plants, simulation, fire effects 3330
- *Umbellularia californica*, triacylglycerols 1252
- variation
  - *Abies pindrow*, diameter, cones, India 3388
  - *Picea smithiana*, diameter, cones, India 3388
- viability
  - accelerated aging, antioxidants, *Acer platanoides*, superoxide dismutase 7180
  - *Shorea robusta*, biochemistry 3009

Seiridium cardinale
- fungal diseases
  - Cupressaceae, amenity trees, Germany 9111
  - *Cupressus lusitanica*, pruning, New Zealand 5638
  - *Cupressus sempervirens*
    - clones, resistance 6052
    - increment, Italy 9106
    - Italy, resistance, damage 4021
    - Mediterranean Region, resistance 6020
    - mycotoxins 8301
    - tree breeding, resistance, selection criteria 5512

Seiridium cupressi, fungal diseases, *Cupressus sempervirens*, mycotoxins 8301

Seiridium unicorne
- fungal diseases
  - *Chamaecyparis obtusa*
    - Japan, spread, damage 4865
    - resistance, age of trees 6630
  - *Cupressocyparis leylandii*, pathogenicity 5637
  - *Cupressus lusitanica*, pruning, New Zealand 5638
  - *Cupressus sempervirens*, mycotoxins 8301

Selection forests
- broadleaves, natural regeneration, France, canopy gaps 5124
- conifers, crown, stand structure, Japan 4360, 6824
- mixed forests, pruning, France 5152

Selection forests *cont.*
- *Picea abies,* silvicultural systems, Germany 918
- site class assessment, site types, Switzerland 6967
- stand characteristics
  - France 916
  - measurement, methodology 3505

Selection system (*see* Silvicultural systems, selection system)

Selective felling
- forest trees, natural regeneration, stand development, Japan, logging effects 6910
- *Quercus,* forest ecology, Canada, plant colonization 3427

Semanotus japonicus, insect pests, *Cryptomeria japonica,* Japan, behaviour, ecology 2339

Semecarpus, rain forests, canopy gaps, photoinhibition, Papua New Guinea 1287

Semecarpus obovata, endangered species, Sri Lanka 10123

Semecarpus pseudo-emarginata, endangered species, Sri Lanka 10123

Semiarid zones, woody plants, ecosystems, agroforestry, Sahel, books 8466

Senecio cooperi, epiphytes, plant nutrition, adventitious roots, Costa Rica 3732

Senegal
- *Acacia*
  - pollination, insects 3842
  - seed banks 3962
  - seed set 3842
  - taxonomy 9981
- *Acacia senegal,* provenance, genetic variation, isoenzymes 9981
- *Acacia tortilis,* reproductive behaviour 3842
- broadleaves, forest plantations, sand dune stabilization 4939
- *Casuarina equisetifolia,* forest litter, measurement 6283
- Fabaceae, root nodules, surveys 2236
- *Faidherbia albida,* pollination, insects 3842
- forest management, community forestry 9294
- mangrove forests, drought, effects 8760
- root nodules, *Bradyrhizobium, Faidherbia albida* 8266
- symbiosis, *Bradyrhizobium, Faidherbia albida,* theses 5667

Senescence
- *Acer platanoides,* foliage, colour, pigments 5410
- *Ginkgo biloba,* foliage 4649
- *Populus*
  - air pollution
    - chemistry, *myo*-inositol 4549
    - foliage, chemistry, raffinose 334

Septoria, fungal diseases, *Populus trichocarpa,* tree breeding, resistance 3999

Septoria pistaciae, fungal diseases, *Pistacia integerrima,* India, foliage 3168

Septoria populicola
- fungal diseases
  - *Populus trichocarpa*
    - Canada 8308
    - USA 8308

Sequoia, insect pests, *Phloeosinus,* Austria 9167

Sequoia gigantea (*see Sequoiadendron giganteum*)

Sequoia sempervirens
- flooding, sediment yield, New Zealand, tolerance 4525
- in vitro culture, micropropagation, reviews 2591
- increment, respiration 3014
- molecular genetics, restriction fragment length polymorphism 9036
- mycorrhizas, *Glomus mosseae,* inoculation 9076
- thinning, increment, USA 4357
- tissue culture, proteins, growth 2609
- vegetative propagation, grafting, juvenility, plant composition, phosphoproteins 8922
- wood chemistry, esters 1253

Sequoiadendron giganteum
- age of trees, USA, methodology 9314
- bark, chemistry, proteins 3786
- forest fires, soil chemistry, USA 2918
- fungal diseases, *Botryosphaeria dothidea,* France 1460
- mycorrhizas, *Glomus mosseae,* inoculation 9076
- ozone, plant physiology, USA 2068
- provenance trials, Germany 1674
- wood chemistry, proteins 3786

Serbia
- fungal diseases
  - *Mycosphaerella pini*
    - *Picea omorika* 5653
    - *Pseudotsuga menziesii* 5653

Serenoa repens, autecology, USA 6525

Serianthes minahassae, wood chemistry, Indonesia 6448

Sericulture
- *Morus,* agroforestry, India 2412
- *Morus cathayana,* agroforestry, Indonesia 1805

Sesarma meinerti, crabs, mangroves, forest litter, degradation, South Africa 1523

Sesbania, seed collection, genetic resources, international cooperation, Africa South of Sahara 3136

Sesbania bispinosa, tissue culture, protoplast culture, culture media 5099

Sesbania formosa, seed germination, seed treatment 85

Sesbania grandiflora
- allelopathy, foliage, extracts 3106
- cutting, species trials, biomass production, increment, Western Samoa 1668
- plant morphology, meiosis, India, variation 4650
- species trials, fodder, production, Indonesia 3371
- tissue culture, cotyledons 5093

Sesbania keniensis, seed collection, Kenya 3993

Sesbania punicea, woody weeds, biological control, South Africa 8640

Sesbania sesban
- biomass production, estimation, Israel, equations 7670
- fodder, production, India 9559
- root nodules
  - development, seedling growth, temperature 6621
  - surveys, oxisols, Zaire 2240
- seed collection, Kenya 3993
- seedling growth
  - biofertilizers, Puerto Rico 1713
  - seeds, pollution, vehicles, Pakistan 10155
- species trials, fodder, production, Indonesia 3371
- symbiosis
  - *Rhizobium*
    - nitrogen fixation, seedlings, isotope dilution 8263
    - seed inoculation 6880
      - aerial sowing 2242
- variety trials, fodder, production, Ethiopia 9560

Sex
- *Leucadendron rubrum,* plant growth regulators, cytokinins, phenology, South Africa 3778
- *Phillyrea angustifolia,* reproductive behaviour, Spain, insect pests, *Schizomyia phillyreae* 4735
- *Pinus taeda,* genetics, recombination 8208
- *Quassia simarouba,* forest influences, soil chemistry, phosphorus, Costa Rica 5350
- *Zamia furfuracea,* cones, pollination, insects 3835

Sex expression
- *Picea glauca,* gibberellins, effects 9871
- *Pinus banksiana*
  - container grown plants, stress 9870
  - plant nutrition
    - gibberellins
      - plant water relations 1318
      - topping 1318

Sex ratio, *Juniperus virginiana,* stand characteristics, Canada 549

Sexual reproduction, *Betula tortuosa,* buds, Finland 4731

Seychelles, flora, checklists, books 757

Shade, tolerance, natural regeneration, foliage, nitrogen, South Africa 5468

Shade trees
- crops
  - *Albizia procera,* spacing, Cuba 1557
  - *Leucaena leucocephala,* spacing, Cuba 1557
  - plant parasitic nematodes, *Meloidogyne,* Cuba 1496
- density, canes and rattans, *Calamus manan,* increment, Indonesia 1802
- plantations, multipurpose trees, inventories, Côte d'Ivoire 4116
- USA, evaluation 8457

Shading
- *Duabanga moluccana,* seedling growth, NPK fertilizers, Indonesia 6070
- *Robinia pseudoacacia,* seedlings, photosynthesis, defoliation, branches 2076

Sheep
- *Acer pseudoplatanus,* agroforestry, birds, ecology, UK 6725
- coniferous forests, natural regeneration, weed control, agroforestry, USA 7583
- *Eucalyptus,* agroforestry, browsing damage, Australia 9270
- *Khaya,* forest plantations, agroforestry, Cuba 1556
- *Larix eurolepis,* agroforestry, birds, ecology, UK 6725
- *Swietenia macrophylla,* forest plantations, agroforestry, Cuba 1556

Shelter, *Eucalyptus polyanthemos,* establishment, microclimate, Australia 3442

Shelterbelts
- *Acacia tortilis,* savanna woodlands, Tanzania 4946
- agricultural land, planning, Germany 1535
- broadleaves, irrigation, saline water 1534
- crop yield, *Ulmus pumila,* Kazakhstan 8382
- crops
  - *Azadirachta indica,* microclimate, Niger 7384, 8383
  - *Dalbergia sissoo,* India 10107
  - *Eucalyptus,* India 710, 9281
  - *Grevillea,* India 710
  - *Leucaena,* India 710
  - *Leucaena leucocephala,* India 9281
  - *Salix,* root pruning, plant competition, New Zealand 2411
- erosion control, soil properties, Canada 8386
- establishment, *Tamarix,* shoot cuttings, saline soils, Mexico 7556
- *Eucalyptus camaldulensis,* microclimate, Italy, effects 6701
- farmers' attitudes, USA 8385
- history
  - Europe 5844
  - silviculture, Denmark 5847
- insect pests
  - *Lepidosaphes salicina,* China, natural enemies 5688
  - natural enemies, biological control, reviews 9189
- *Juniperus,* provenance trials, USA 8562
- land use planning, China 2403
- multipurpose trees
  - species trials
    - irrigation, saline water, Saudi Arabia 2559
    - soil properties, India 3689
- *Populus,* agricultural land 2402
- reclamation
  - afforestation, agroforestry, research, Russia, books 2455
  - soil organic matter, Russia 5853
  - steppe soils, Russia 5854
- *Salix,* agricultural land 2402
- snow, control, China 8381
- tree breeding, Canada, broadleaves 3967

- **Shelterbelts** *cont.*
  - wind speed, control, protection, mathematical models 8502
- **Shelterwood system** (*see* Silvicultural systems, shelterwood system)
- ***Shepherdia canadensis,*** root nodules, inoculation 4841
- **Shifting cultivation** (*see also* Agroforestry)
  - *Acacia,* nitrogen cycle, Sahel, simulation 8429
  - agroforestry, carbon cycle, soil organic matter, Tropics, reviews 8427
  - bamboos, *Dendrocalamus hamiltonii,* natural regeneration, India 8426
  - birds, rain forests, Colombia 3222
  - conferences 8491
  - deforestation
    - control, Tropics 4102
    - Indonesia 5868
  - ecology, deforestation, history, Sierra Leone 3265
  - forests, remote sensing, image interpretation, India 2757
  - multipurpose trees, lac, China 978
  - primates, ecology, virgin forests, Sierra Leone 3215
  - soil conservation, water conservation, Sri Lanka 6731
  - soil degradation, hill land, deforestation, land use, India 10087
  - soil fungi, mycorrhizal fungi, India 8436
  - sustainability
    - control, India 726
    - reviews 7574
  - women, indigenous knowledge, minor forest products, India 6846
- **Shoots**
  - abnormal development, *Picea pungens,* plant growth regulators 4716
  - *Betula pendula*
    - phenology, temperature, genetic variation 8041
    - vegetative propagation, habit, UK 410
  - carbohydrates, *Psychotria,* water availability, phenology, Panama 7946
  - cones, *Picea,* plant morphology, Canada 9787
  - conifers
    - Germany, emission, hydrogen sulfide 8099
    - light, interception, USA 3733
  - development
    - conifers, defoliation, forest decline, Germany 9865
    - morphology, *Fraxinus pennsylvanica,* Canada 2947
    - *Pinus sylvestris,* plant nutrition, genetic variation 3717
    - *Quercus robur,* tissue culture 3395
    - *Sclerocarya birrea,* plant growth regulators, gibberellic acid 8923
  - *Fagus sylvatica,* buds, France, biomass, development 4638
  - *Fraxinus excelsior,* defoliation, phenology, growth 3711
  - growth
    - *Eucalyptus camaldulensis,* plant physiology, climate, Australia 3765
    - *Fagus sylvatica,* ozone, water stress 3022
    - *Fraxinus pennsylvanica,* pruning 4619
    - *Picea abies,* plant growth regulators, auxins, inhibitors 8925
    - *Pinus sylvestris*
      - defoliation, Finland 2959
      - plant growth regulators, Russia 2074
  - *Laguncularia racemosa,* Guinea, growth, morphology 9782
  - morphology
    - conifers 2934
    - *Pinus,* plant nutrition, plant physiology, USA 2036
    - resin canals, *Picea sitchensis,* pest resistance, Canada 1490
  - nutrients, *Picea abies,* grafts, flowering, Poland 1132
  - *Pinus sibirica,* development, morphology 3728
- **Shoots** *cont.*
  - *Pinus sylvestris*
    - foliage
      - light
        - Finland 2035
        - Sweden 2035
  - *Populus maximowiczii* × *Populus nigra,* coppicing, photosynthesis, plant nutrition, carbohydrates 7195
  - proteins, messenger RNA, *Populus* 'Robusta', seasonal variation 1251
  - *Salix,* coppice, buds 6392
  - *Salix alaxensis,* buds, reproductive behaviour 8122
  - shrubs, fire ecology, plant physiology, Spain 9775
  - structure, conifers, photosynthesis, light, carbon dioxide 8109
  - *Taxodium distichum,* flooding, roots, biomass production 312
  - weight, *Pinus sylvestris,* canopy, insolation, Poland 3475
- ***Shorea***
  - flowering, Peninsular Malaysia 472
  - shelterwood system, natural regeneration, sustainability, Sri Lanka 921
  - swamps, silvicultural systems, Peninsular Malaysia 8606
  - vegetative propagation, Malaysia 2602
- ***Shorea acuminata,*** genetic variation, Peninsular Malaysia 6603
- ***Shorea albida***
  - shoot cuttings, Sarawak 5074
  - tissue culture, Brunei Darussalam 6893
- ***Shorea almon,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Shorea assamica,*** wood anatomy, taxonomy, identification, Philippines 412
- ***Shorea compressa***
  - mycorrhizas
    - *Boletus,* nutrient uptake, seedlings 1448
    - *Russula,* nutrient uptake, seedlings 1448
    - *Scleroderma columnara,* nutrient uptake, seedlings 1448
- ***Shorea congestiflora,*** outcrossing, Sri Lanka 3034
- ***Shorea contorta,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Shorea curtisii***
  - genetic variation, Peninsular Malaysia 6603
  - increment, silviculture, Peninsular Malaysia, plantations 2698
  - tissue culture, Brunei Darussalam 6893
  - tropical forests, biomass, Peninsular Malaysia, estimation 8706
- ***Shorea disticha,*** seedlings, light, rain forests, Sri Lanka, plant succession 7022
- ***Shorea guiso,*** wood anatomy 414
- ***Shorea hopeifolia***
  - seedlings, identification, Indonesia 1324
  - wood anatomy, taxonomy, identification, Philippines 412
- ***Shorea johorensis***
  - mycorrhizas, development, light intensity, Indonesia 2229
  - planting, Indonesia 1790
  - secondary forests, improvement planting, Indonesia, methodology 7770
  - seedlings, identification, Indonesia 1324
- ***Shorea laevis***
  - seedlings
    - ectomycorrhizas, Indonesia, planting stock, inoculation methods 4845
    - identification, Indonesia 1324
  - vegetative propagation, greenhouses, techniques 9452
- ***Shorea leprosula***
  - forest plantations, wood properties 350
  - genetic variation, Peninsular Malaysia 6603
  - increment, silviculture, Peninsular Malaysia, plantations 2698
  - mycorrhizas, development, light intensity, Indonesia 2229
  - secondary forests, improvement planting, Indonesia, methodology 7770
- ***Shorea leprosula*** *cont.*
  - seedling growth
    - *Acacia mangium,* soil, allelopathy, Indonesia 2159
    - mortality, NPK fertilizers, Indonesia 1710
  - selective felling, soil degradation, Sabah, logging effects 8771
  - shoot cuttings 9456
    - plant growth regulators, Malaysia 6890
  - vegetative propagation, greenhouses, techniques 9452
- ***Shorea macroptera,*** seed germination, growing media, Peninsular Malaysia 7730
- ***Shorea megistophylla***
  - seedlings, light, rain forests, Sri Lanka, plant succession 7022
  - selective felling, reproductive behaviour, inbreeding, Sri Lanka 5425
- ***Shorea multiflora,*** seedling growth, mortality, NPK fertilizers, Indonesia 1710
- ***Shorea negrosensis,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Shorea ovalis***
  - mycorrhizas, development, light intensity, Indonesia 2229
  - seedlings, identification, Indonesia 1324
- ***Shorea palembanica,*** seedling growth, *Eucalyptus,* extracts, allelopathy 2160
- ***Shorea palosapis,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Shorea parvifolia***
  - forest plantations, wood properties 350
  - increment, silviculture, Peninsular Malaysia, plantations 2698
  - mycorrhizas, development, light intensity, Indonesia 2229
  - secondary forests, improvement planting, Indonesia, methodology 7770
  - seedlings, identification, Indonesia 1324
  - shoot cuttings, Indonesia 1686
  - vegetative propagation, greenhouses, techniques 9452
- ***Shorea pauciflora,*** vegetative propagation, greenhouses, techniques 9452
- ***Shorea pinanga***
  - mycorrhizas
    - *Boletus,* nutrient uptake, seedlings 1448
    - *Russula,* nutrient uptake, seedlings 1448
    - *Scleroderma columnara,* nutrient uptake, seedlings 1448
- ***Shorea polita,*** wood anatomy, taxonomy, identification, Philippines 412
- ***Shorea polysperma,*** bark, anatomy, taxonomy, identification, Philippines 413
- ***Shorea robusta***
  - books 6772
  - climax communities, understorey, synecology, India 522
  - coppice, management, yields, Nepal 6908
  - degraded forests, stand structure, synecology, India 213
  - forest plantations
    - India 933
    - soil biology, India, seasonal variation 7940
    - synecology, ground vegetation, biomass production, India 9933
  - forests
    - grazing, fodder, production, India 682
    - medicinal plants, collection, India 6154
    - soil chemistry, India, statistical analysis 1901
  - monographs 6772
  - plant parasitic nematodes, *Paralongidorus sali,* India, damage 5779
  - protection of forests, vegetation, degradation, synecology, India 1366
  - reproductive behaviour, phenology, abscission, India 388
  - root cuttings, Bangladesh 6045
  - seeds, viability, biochemistry 3009
  - stand characteristics, stand structure, biomass production, India 1410
  - understorey, stand characteristics, India 5471

- ***Shorea roxburghii,*** in vitro culture, micropropagation 9448
- ***Shorea seminis,*** vegetative propagation, greenhouses, techniques 9452
- ***Shorea smithiana,*** seedlings, ectomycorrhizas, Indonesia, planting stock, inoculation methods 4845
- ***Shorea stenoptera***
  - forest nurseries, transplanting, seedling growth, Indonesia 1719
  - mycorrhizas
    - *Boletus,* nutrient uptake, seedlings 1448
    - *Russula,* nutrient uptake, seedlings 1448
    - *Scleroderma columnara,* nutrient uptake, seedlings 1448
  - seedling growth, *Acacia mangium,* soil, allelopathy, Indonesia 2159
- ***Shorea trapezifolia***
  - outcrossing, Sri Lanka 3034
  - seedlings, light, rain forests, Sri Lanka, plant succession 7022
- ***Shorea uliginosa,*** seedlings, identification, Indonesia 1324
- ***Shorea virescens,*** wood anatomy, taxonomy, identification, Philippines 412
- ***Shorea worthingtonii,*** seedlings, light, rain forests, Sri Lanka, plant succession 7022
- **Short rotation forestry**
  - birds, forest trees, Germany 7540
  - broadleaves, USA, simulation 913
  - climatic change, energy resources, Sweden 4471
  - energy resources, environmental factors, forest economics, USA, techniques 6100
  - environmental factors, conferences 5942
  - *Eucalyptus,* USA 6098
  - fuel plantations, Germany 4251, 6009
  - nitrogen fixing trees, biomass production, India 1736
  - *Pinus*
    - increment, USA 2703
    - USA 6098
  - *Pinus* (Southern), forest plantations, wood properties, USA, conferences 2459
  - *Populus*
    - France 6913
      - site factors 6912
    - growth models, photosynthesis, USA 1619
    - height, Western Europe, border effects 8700
    - land use, abandoned land, Italy 6136
    - stand density, spacing, methodology, estimation 2207
    - subsidies, Italy, setaside 1640
  - *Populus interamericana,* irrigated stands, Canada, growth 1752
  - Salicaceae, ground vegetation, Germany 6554
  - *Salix*
    - biomass production, USA 6029
    - tree breeding, biomass production, Finland 5522
    - weed control, soil water, Canada 917
  - species trials, Republic of Georgia 2546
- **Shrubs** (*see* Woody plants)
- ***Sibiraea***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- **Sicily**
  - *Betula aetnensis,* autecology 1330
  - forest fires, environmental impact 6377
  - *Quercus ilex,* plant water relations, cavitation, climatic factors, geographical distribution 3613
  - soil, water erosion, losses, mapping 704
- ***Sickingia salvadorensis,*** wood anatomy 4629
- ***Sida rhombifolia,*** medicinal plants, Zaire 7808
- **Sierra Leone**
  - primates
    - ecology, virgin forests, shifting cultivation 3215
    - rain forests, plant succession 1527
- **Sierra Leone** *cont.*
  - shifting cultivation, ecology, deforestation, history 3265
  - ungulates, rain forests, plant succession 1527
- **Silkworms**
  - *Morus alba,* phosphorus fertilizers, foliage, India 7802
  - Saturniidae, carbon dioxide enrichment, *Betula papyrifera,* food plants 8683
- **Silvicultural characters**
  - *Abies,* provenance trials, France 833
  - *Acer insigne,* Iran, species trials, France 7147
  - *Alnus subcordata,* Iran, species trials, France 7147
  - *Amelanchier,* ornamental woody plants, Canada 2436
  - *Calophyllum caledonicum* 9411
  - *Cocos nucifera* 9410
  - *Dicorynia guianensis,* stand development, French Guiana 3706
  - *Grevillea robusta,* ecology, silviculture, protection, utilization 6385
  - *Juglans regia,* geographical distribution, plant morphology, Italy 6138
  - Lauraceae, Canary Islands 8888
  - ornamental woody plants, USA 8456
  - *Picea pungens,* stand characteristics, Romania 8663
  - *Quercus frainetto,* stand characteristics, geographical distribution, Italy 6391
  - *Sorbus,* France 957
  - *Sorbus torminalis,* Switzerland 3466
- **Silvicultural conversion**
  - broadleaves
    - coppice
      - Greece, geographical distribution, management 8618
      - plant physiology, Italy 8935
    - natural regeneration, Germany 9493
  - conifers, Germany 6132
  - coppice, Italy, reviews 8617
  - *Fagus sylvatica*
    - coppice
      - Croatia 4319
      - Italy, stand structure 8602
    - coppice with standards, Italy 6093
  - forest trees, mixtures, Austria 6940
  - management
    - *Abies,* Poland 952
    - *Picea,* Poland 952
  - *Pinus sylvestris*
    - broadleaves, Germany 4322
    - Germany 9501
    - thinning, Germany 9498
  - planning, deciduous forests, remote sensing, Netherlands 150
  - *Quercus,* coppice, Greece, geographical distribution, management 8618
  - *Quercus cerris*
    - agroforestry, Italy 1558
    - coppice
      - Italy 8608
        - forest litter, leaf area index 8664
        - leaf area index, estimation 8898
      - plant physiology, Italy 8935
      - soil properties, Italy 8792
      - stand structure, Italy 8609-8610
  - *Quercus robur,* forest decline, Croatia 6502
  - selection system, Europe 912
- **Silvicultural systems**
  - *Abies pindrow,* site class assessment, soil chemistry, India 2815
  - birds, *Eucalyptus,* Australia, logging effects 7532
  - broadleaves, stand characteristics, Belgium 949
  - clear felling
    - birds, *Dacrydium cupressinum,* forest management, New Zealand 1507
    - coniferous forests, landscape, USA 4132
    - *Picea abies*
      - site preparation, artificial regeneration, Sweden 9541
- **Silvicultural systems** *cont.*
  - clear felling *cont.*
    - *Picea abies cont.*
      - understorey, species diversity, Sweden 9484
    - *Picea sitchensis,* hydrology, UK 5830
    - wildlife, boreal forests, forest borders, Sweden 5810
  - clear strip felling
    - mixed forests
      - runoff
        - evapotranspiration, Japan 4931
        - Japan, logging effects 4934
    - *Rhizophora mangle,* natural regeneration, Ecuador 9490
  - conifers
    - natural regeneration, Canada 8621
    - soil fertility, France 9711
  - coppice
    - clear felling, *Eucalyptus globulus,* hydrology, Portugal 3687
    - cutting date, *Acer rubrum,* biomass production, Canada 923
    - growth, *Eucalyptus tereticornis,* India 1734
    - management, yields, *Shorea robusta,* Nepal 6908
    - multipurpose trees, USA, growth 6090
  - coppice with standards, *Fagus sylvatica,* silvicultural conversion, Italy 6093
  - *Eucalyptus*
    - Australia 2628
    - forest economics, Brazil, returns 5217
  - *Fagus sylvatica* 8604
  - forest trees, forest economics, simulation, USA 1870
  - group fellings
    - forest trees, canopy gaps, plant succession, Germany 8607
    - *Nothofagus pumilio,* natural regeneration, Argentina 1742
  - history, Germany 5972
  - intensive silviculture
    - conferences 765
    - forestry development, Indonesia, ecology, environment 914
    - *Robinia pseudoacacia*
      - pulpwood production, biomass production, Korea Republic 8710
      - stand density, biomass production, Korea Republic 8709
  - logging, Canada, costs 7855
  - old-growth forests, USA 8605
  - *Picea,* insects, species diversity, conservation, Norway 7418
  - *Picea abies,* selection forests, Germany 918
  - *Picea sitchensis,* UK, wood properties 6133
  - *Picea smithiana,* site class assessment, soil chemistry, India 2815
  - *Pinus*
    - hydrology, Cuba 4937
    - stand characteristics, USA 7304
  - *Pinus nigra,* stand characteristics, natural regeneration, Italy 3429
  - *Pinus sylvestris,* history, Germany 915
  - *Pinus taeda,* microclimate, USA 922
  - savannas, forest management, climate, Africa 8600
  - selection system
    - *Acer saccharum,* heartwood, discoloration, USA 1181
    - boreal forests, Japan 1735
    - broadleaves, Canada 2629
    - Europe
      - history 912
      - reviews 912
    - forest management, Iran 6102
    - forest trees, stand characteristics, Germany 6132
    - France, economics 8603
    - genetic diversity, Switzerland 7334
    - genetic resources, conservation, natural regeneration 1418
    - *Nothofagus truncata,* New Zealand 6092

Silvicultural systems *cont.*
- selection system *cont.*
  - *Picea abies*
    - increment, stand development, Norway 9489
    - stand structure, Sweden 9485
  - *Pinus taeda*
    - increment, USA 3480
    - natural regeneration, ground vegetation, USA 6099
  - rain forests, simulation, Australia, sustainability 4428
  - research, Switzerland 38
  - terminology, German 5936
  - UK, books 6778
  - yield forecasting, forest management, Japan, planning 4411
- selective felling
  - birds
    - *Dacrydium cupressinum,* forest management, New Zealand 1508
    - ecology, statistical analysis 2502
  - Dipterocarpaceae, forests, fruiting, Peninsular Malaysia 8127
  - forest ownership, Fiji 8601
  - forest trees, soil degradation, Sabah, logging effects 8771
  - Indonesia 5123
  - *Picea abies,* understorey, species diversity, Sweden 9484
  - planning, sustainability, secondary forests, Venezuela 5122
  - rain forests, stand structure, Indonesia, logging effects 1738
  - *Shorea,* swamps, Peninsular Malaysia 8606
  - *Shorea megistophylla,* reproductive behaviour, inbreeding, Sri Lanka 5425
  - sustainability, simulation, Philippines 920
- shelterwood, *Picea abies,* forest economics, Austria, simulation 6915
- shelterwood system
  - Dipterocarpaceae, natural regeneration, sustainability, Sri Lanka 921
  - insect pests, *Hylobius abietis,* conifers, Sweden 4041
  - natural regeneration
    - broadleaves, USA 146
    - microclimate, Sweden, monitoring, equipment 9333
  - *Picea abies*
    - natural regeneration
      - artificial regeneration, Sweden 9541
      - Sweden 9488
    - understorey, species diversity, Sweden 9484
    - wind damage, Sweden 3559
  - *Pinus strobus,* Canada 4316
  - *Pinus sylvestris*
    - microclimate, Sweden, radiation 3428
    - natural regeneration, site preparation, Poland 6918
  - *Pinus taeda*
    - microclimate, USA, equations 2787
    - plant water relations, microclimate, USA 5277
  - *Quercus rubra,* underplanting, weed control, Canada 9487
  - rain forests, light, India 8619
- short rotation forestry
  - *Alnus incana,* thinning, Sweden 7769
  - fallow
    - France
      - *Eucalyptus* 6101
      - *Populus* 6101
  - farm forestry, fuel plantations, UK, books 7623
  - forest economics, Italy 9486
  - multipurpose trees, USA, growth 6090
- *Taxus baccata,* stand development, Slovakia 6909
- yields, UK 6091

Silviculture (*see also* particular operation concerned, e.g. Cleaning; Improvement fellings; Planting; Thinning)
- *Acer pseudoplatanus,* nature conservation, UK, reviews 10125
- afforestation, marginal land, reclamation, India, books 4
- *Agathis robusta,* exotics, India 9544
- *Alnus rubra,* books 6784
- *Aspidosperma quebracho-blanco,* forest management, grazing, Argentina 1504
- atmosphere, forest influences, carbon cycle, Norway, simulation 2901
- *Betula pendula,* stand characteristics, Croatia 4363
- biology, canes and rattans, *Calamus manan,* Indonesia 973
- broadleaves, natural regeneration 8622
- Canada, conferences 4172
- canes and rattans, *Calamus,* plantations, Indonesia 974
- *Castanea sativa*
  - forest resources, Italy 3465
  - UK 6943
- *Casuarina,* books 2448
- conifers
  - plant nutrition, translocation, Canada 6324
  - protection forests, France, mountain forests 5840
- controlled burning, forest management, Canada 2002
- decision making, Canada, investment 238
- *Dryobalanops sumatrensis,* increment, Peninsular Malaysia, plantations 2698
- *Eucalyptus*
  - forest management, sustainability, South Africa 7794
  - forest plantations, research, Australia 4364
- *Eucalyptus globulus,* forest plantations, Chile 3464
- *Eucalyptus obliqua,* forest ecology, Australia, Carabidae 7417
- Europe, forest influences 7130
- *Fagus sylvatica*
  - heartwood, formation, prevention, Poland 1180
  - understorey, Germany 9545
- *Fitzroya cupressoides,* Chile 2660
- forest ecology 8557
  - reviews 4323
  - sustainability 7813
  - theory 3364
- forest management
  - computer techniques, Canada, decision making, planning 9368
  - multiple use, leadership 3490
  - planning, Germany 9617
  - sustainability 6106
  - theory 4378
- forest plantations
  - France, growth 932
  - guidelines 8599
- forest roads, logging, Japan 4419
- forest trees
  - biology, agriculture, Tropics, reviews 9372
  - genotypes, wood properties, reviews 8008
  - plant nutrition, statistical analysis 5014
- *Fraxinus excelsior,* UK 4365
- fungal diseases, *Cronartium fusiforme, Pinus,* USA 10021
- *Gevuina avellana,* Chile 2663
- Ghana, handbooks 59
- *Grevillea robusta*
  - ecology, silvicultural characters, protection, utilization 6385
  - multipurpose trees, tree breeding, agroforestry, conferences 2462
- *Heritiera utilis,* forest plantations, Côte d'Ivoire 9495
- history, theory 3430
- Hungary, conferences 4172

Silviculture *cont.*
- intensive silviculture
  - *Eucalyptus,* breeding programmes, pulpwood production, South Africa 553
  - *Pinus,* breeding programmes, pulpwood production, South Africa 553
- *Khaya,* forest plantations, Côte d'Ivoire, growth, yield forecasting 4333
- management, bamboos, India 9561
- mixed forests
  - forest health 5049
    - France 6864
  - Germany 919
- mixtures, Switzerland 178
- mountain forests, Switzerland 4318
- nature conservation, Sweden 6919
- *Nothofagus pumilio,* mensuration, synecology, Chile, reviews 955
- organizations, Swaziland, handbooks 7699
- parasitic plants, *Santalum album,* India, host parasite relationships 186
- peatlands, reviews 8469
- *Picea abies,* Christmas trees, Russia 965
- *Picea sitchensis,* wood properties, Northern Ireland 7117
- *Pinus koraiensis,* mixtures, Russia 9542
- *Pinus palustris,* USA, conferences 771
- *Pinus radiata,* soil organic matter, podzolic soils, carbon cycle, Australia 4489
- *Pinus taeda,* forest economics, USA, regeneration 954
- *Pithecellobium dulce,* India 956
- *Podocarpus totara,* New Zealand 3426
- *Populus,* statistics, Italy 6135
- *Populus* 'Beaupré', coppice, France, biomass production 149
- protection forests, Arid Regions, Russia 9234
- *Prunus avium,* increment, Germany 6137
- *Pseudotsuga menziesii*
  - forest economics, USA, wood properties 5214
  - Germany 4362
  - New Zealand 2659
- *Quercus*
  - Belgium, books 4159
  - France, books 4159
  - research, conferences 4180
  - site factors, Belgium, wood properties 8860
  - wood properties, simulation, France 4588
- *Quercus robur*
  - forest decline, Croatia 4725
  - mixtures, Ukraine 1785
  - Ukraine 2661
- Russia 4237
- *Salix*
  - forest plantations, Azerbaijan 1787
  - UK, plant introduction 6148
- *Schleichera oleosa,* India 958
- *Schleichera trijuga,* India 958
- shelterbelts, history, Denmark 5847
- *Shorea,* increment, Peninsular Malaysia, plantations 2698
- site types, maps, Germany 9639
- spades, UK, surveys 9552
- stand structure
  - development, forest management, theory 5191
  - growth models, simulation 4199
- streams, chemistry, USA 9235
- *Styrax tonkinensis*
  - Lao 2662
  - Vietnam 2662
- *Tectona grandis,* forest management, Indonesia, forest policy 8668
- tropical forests, natural regeneration, forest ecology 9009
- USA, conferences 2465, 2471, 4172
- utilization, *Populus tremula,* choice of species, UK, reviews 9546
- vegetation types, USA, books 3301
- virgin forests, USA, deciduous forests 3432
- wetlands, water quality, USA 7545

- **Simaroubaceae**
  - phylogeny 3997
  - taxonomy 7220
- **Simulation**
  - *Abies alba,* acid deposition, soil chemistry, plant composition 2889
  - *Abies religiosa,* forest management, nature conservation, rural economy, Mexico 3280
  - *Acacia farnesiana,* precipitation, canopy, Mexico 2398
  - *Acer pseudoplatanus,* plant nutrition, nitrogen 3637
  - *Acer saccharum,* dendrochronology, forest decline, Canada 1591
  - acid deposition
    - soil chemistry
      - cycling, USA 3666
      - hydrology, Sweden 1905
      - Scandinavia 8510
    - water pollution, surveys, forest influences, UK 3677
  - agroforestry
    - computer techniques 9358
    - soil fertility, plant competition, Tropics 4107
  - air pollution, plant physiology, stress factors, interactions 1974
  - atmosphere, forest influences, silviculture, carbon cycle, Norway 2901
  - *Betula papyrifera,* stomatal resistance, gas exchange, Canada 801
  - biomass production
    - carbon dioxide enrichment, nutrient availability 1057
    - climatic change, nitrogen cycle 1834
  - birds, *Tetrao tetrix,* forest management, decision making 9200
  - boreal forests
    - carbon cycle, climate, Russia 328
    - climatic change, forest ecology, Finland 1621
    - climatology 4768
    - ecotones, *Picea mariana,* natural regeneration, Canada 799
    - forest management, nature conservation, Canada 9621
    - natural regeneration, Russia, management 9965
    - stand characteristics, biomass production, Canada 9596
  - broadleaves
    - forest fires, forest ecology 2920
    - frost resistance, climate, USA 800
    - phenology, prediction, USA 387
    - stand characteristics, plant competition, yield tables 6832
  - canopy, energy relations 1284
  - canopy gaps
    - broadleaves, photosynthesis, photoinhibition, Papua New Guinea 1287
    - dynamics 9958
  - carbon cycle
    - Canada 3623
    - data collection, boreal forests 1029
  - *Cedrela odorata,* increment, light, Peru 6167
  - climate
    - measurement, equipment 1609
    - vegetation, effects 7678
  - climatic change
    - phenology, frost resistance, Western Europe 2804
    - plant physiology, plant succession 3333
    - USA 2507
  - coniferous forests
    - acid deposition, canopy, leaching 8374
    - air pollution, Russia 7091
    - biomass, remote sensing, USA 1042
    - climatic change
      - China 3555
      - USA 3542
    - forest litter, decomposition, soil organic matter 6285
    - nitrogen cycle, carbon cycle, Europe 9364
    - remote sensing
      - stand characteristics, USA 1039
- **Simulation** *cont.*
  - coniferous forests *cont.*
    - remote sensing *cont.*
      - synecology, USA 1338
      - USA 1853
    - synecology
      - climate, USA 1340
      - remote sensing, USA 1347
    - watersheds, hydrology, USA 4084
  - conifers
    - canopy, light penetration 5223
    - climatic change, USA 8705
    - crown, morphology 4218
    - forest decline, population dynamics, Austria 6825
    - nitrogen cycle, water pollution, USA 3625
    - ozone, nutrient deficiencies, interactions 1976
    - provenance trials, climatic change, adaptation, temperature 1660
    - seedlings, acid deposition, growth, damage 8834
    - stand characteristics, plant competition, yield tables 6827
    - synecology, species diversity, Sweden 5965
  - *Cryptomeria japonica*
    - crown, light, Japan 1782
    - pollen, allergens, dispersion, Japan 7217
    - thinning
      - crown
        - biomass 4352
        - light, Japan 1773
  - *Dacryodes excelsa*
    - biomass production, wind damage, Puerto Rico 1071
    - soil chemistry, wind damage, Puerto Rico 1071
  - dead trees, decay, USA 1331
  - deciduous forests
    - acid deposition, canopy, leaching 8374
    - *Fagus sylvatica,* soil properties, Spain 8785
    - gas exchange, USA 3328
    - soil temperature 1090
  - deer, *Alces alces, Pinus sylvestris,* browsing, Sweden 10071
  - deforestation
    - climate, Tropics 3255
    - forest ownership 4104
    - timber trade, trade sanctions, forest policy, Tropics 4956
    - water quality, streams, soil water, Brazil 8419
    - wildlife, Brazil 4955
  - diffusion models, conifers, foliage, air pollution 4565
  - *Diospyros texana,* precipitation, canopy, Mexico 2398
  - drainage, logging, smallwood 1541
  - elephants, *Loxodonta africana, Adansonia digitata,* browsing damage, Tanzania 4048
  - energy balance 6829
  - erosion, Italy 9239
  - *Erythrina poeppigiana,* gas exchange, Costa Rica, growth, environmental factors 5411
  - *Eucalyptus*
    - forest fires, Australia 4608
    - forest plantations, weed control, increment, South Africa 7786
    - logging, hydrology, Australia 3336
    - stand characteristics, mortality, Australia 2504
    - synecology, site factors, Australia 3329
  - *Eucalyptus exserta,* forest plantations, cycling, China 1139
  - *Eucalyptus globulus*
    - agroforestry, crops, interface, microclimate 9357
    - forest plantations, stand structure, canopy 7817
  - *Eucalyptus grandis*
    - photosynthesis, stomata 6468
    - seedling growth, plant nutrition, nitrogen, phosphorus 32
- **Simulation** *cont.*
  - *Eucalyptus grandis cont.*
    - soil water, increment, South Africa 7680
    - transpiration, methodology 3612
  - *Eucalyptus sieberi,* secondary forests, controlled burning, Australia 2497
  - *Fagus crenata,* understorey, Japan 3117
  - *Fagus sylvatica*
    - crown, increment, forest decline, Switzerland 8944
    - increment, climate, Germany 1058
  - fertilizers, water quality, USA, sewage sludge 3420
  - fire behaviour, Canada 8877
  - foliage, transpiration, photosynthesis, equations 1620
  - forest ecology 3116
    - climatic change
      - reviews 1960
      - Sweden 3110
      - USA 2790
    - forest borders, understorey, Brazil 4748
  - forest fires
    - fire danger, estimation, Australia 4607
    - fire effects, fire weather 2924
    - fire suppression, USA, costs 2001
    - forest ecology 7139
    - Spain 8034
  - forest influences
    - atmosphere
      - precipitation
        - India 9759
        - Tropics 9759
    - watersheds
      - hydrology, Slovakia 5835
      - runoff, Malawi 8870
    - wind 3339
  - forest inventories
    - sampling, regression analysis 5959
    - stand characteristics, statistical analysis, Finland 5198
  - forest management
    - decision making
      - bottomland forests, USA 5213
      - forest economics, Finland 7829
      - risk 3334
    - forest ecology, plant succession, reviews 7681
    - forest economics
      - Developing Countries 3532
      - Sweden 3527
    - growing stock, Netherlands 4429
    - Japan, methodology 2680
    - multiple use
      - Netherlands 4098
      - planning 1618
    - planning 6823
      - decision making, forest economics, Denmark 9623
      - forest economics 4426
    - sustainability
      - forest economics 6834
      - planning, Canada 9619
      - Russia 4415
    - uncertainty 7828
    - USA 3350
    - wildlife, USA 6991
  - forest plantations, soil water, precipitation, South Africa 9354
  - forest resources, climatic change, USA 3543
  - forest trees
    - acid deposition, Netherlands 1967
    - carbon cycle, Spain 2849
    - carbon dioxide enrichment
      - growth 2697
      - habit 7863
    - crown, morphology 798
    - forest economics
      - nature conservation, USA 1870
      - silvicultural systems, USA 1870
    - forest fires, mortality, USA 380
    - forest management 2513
    - genetics, hybrids, polyploidy 7338
    - geographical distribution, migration, global warming, USA 9665
    - increment
      - height 228

Simulation *cont.*
- forest trees *cont.*
  - increment *cont.*
    - USA 7676
  - morphology, agroforestry 9356
  - nutrient allocation, ozone 1977
  - nutrient deficiencies, growth, nutrient allocation 7077
  - plant competition, natural thinning 9362
  - pollen, vegetation, USA 4805
  - population dynamics, savannas, Côte d'Ivoire 2511
  - populations, plant competition, light 9363
  - provenance trials, genotype environment interaction, climatic change 1659
  - recruitment, USA, spatial distribution 4206
  - respiration, dark, foliage, nitrogen 8102
  - seed dispersal, land use, global warming 480
  - seedlings, frost resistance 9360
  - stem form, growth rings, canopy 4209
  - water balance, phytogeography 7682
  - yield forecasting
    - Canada 4200
    - remote sensing, Estonia 1866
- forests
  - canopy, precipitation 7679
  - climatic change
    - Canada 7870
    - North America, growth 3551
  - evapotranspiration, Canada 7948
  - landscape, Canada 4097
  - pesticides, aerial application, Canada 9365
  - plant competition 5472
  - remote sensing, radar, backscatter 7677
- fungal diseases, *Cronartium fusiforme, Pinus elliottii,* USA 7676
- growth models, genetic gain, USA, *Pinus ponderosa* 3337
- growth stress
  - cell walls 6359
  - reaction wood 4590
- *Guiera senegalensis,* savannas, light, Niger 3546
- heathlands, plant competition, forest fires, Australia 3698
- hydraulic conductivity, roots 310
- increment
  - *Pinus strobus,* USA 8509
  - *Pseudotsuga menziesii,* USA 8509
  - theory, forests 4205
  - volume
    - *Cupressus lusitanica,* forest economics, Ethiopia 6972
    - sampling 8506
- insect pests
  - *Choristoneura fumiferana*
    - conifers, stand development, Canada 4224
    - USA, population dynamics 796
  - *Dendroctonus rufipennis, Picea lutzii,* USA 1491
  - Diaspididae, *Acacia saligna,* Israel, parasites 7443
  - *Lymantria dispar*
    - population dynamics 2321
    - USA
      - population dynamics 9151
      - spread, spatial distribution 636
- land use
  - multiple use
    - Canada 9258
    - forest policy, USA 2515
- landscape ecology, fire suppression, USA 4131
- marsupials
  - *Eucalyptus,* Australia 2388
  - *Gymnobelideus leadbeateri, Eucalyptus,* wildlife conservation, Australia 9216

Simulation *cont.*
- marsupials *cont.*
  - *Trichosurus caninus*
    - Australia
      - forest fragmentation 8363-8364
      - population dynamics 8363
      - population genetics 8364
- mixed forests
  - atmosphere, isoprenoids, emission 8011
  - botanical composition, climate, Switzerland 3957
  - composition, mapping, Switzerland 246
  - plant succession, Netherlands 797
- mountain forests, climate, stand characteristics, Canada 7332
- *Myrica cerifera,* thicket, transpiration, USA 8815
- nature reserves, management, degraded forests, Indonesia 7684
- *Picea*
  - air pollution, photosynthesis, Canada 1973
  - stand characteristics, remote sensing, USA 2754
- *Picea abies*
  - air pollution, deposition, Germany 331
  - canopy, leaf area index 2512
  - clear felling, whole tree logging, carbon cycle, Sweden 4535
  - crown, development, thinning 795
  - forest management, Sweden 2513
  - mixtures, increment, Finland 3462
  - photosynthesis, air pollution, foliage, shedding 5405
  - soil chemistry, acidification, seasonal variation, Germany 7978
  - stand development, forest management, sustainability, Finland 9577
  - stand structure, Belgium 4359
- *Picea rubens,* acid deposition, soil chemistry, acidification 345
- *Pinus*
  - forests, evaporation 8511
  - increment, distribution, South Africa 4384
  - yield forecasting, Zimbabwe 6830
- *Pinus elliottii*
  - carbon cycle, USA 3005
  - nutrient uptake, USA 2860
  - roots, nutrient uptake 5301
- *Pinus flexilis,* gas exchange, palaeoecology, USA 4706
- *Pinus koraiensis,* mixed forests, plant succession, China 5457
- *Pinus palustris*
  - increment, basal area, USA 2505
  - site class assessment, USA 1006
- *Pinus pinaster*
  - canopy, precipitation, France 701
  - forest plantations, canopy, precipitation, France 7679
  - stand development, natural thinning, biomass 6828
- *Pinus pinea,* stand characteristics, plant competition, yield tables 6831
- *Pinus radiata*
  - agroforestry, economics, Australia 7578
  - forest fires, Australia 4608
  - habit, internodes, site factors, New Zealand 3710
- *Pinus resinosa*
  - forest plantations, thinning, USA 8508
  - geographical distribution, climate, North America 2135
- *Pinus sylvestris*
  - biomass production, climate, Finland 3488
  - canopy, light, natural regeneration, Finland 9664
  - crown, thinning, Finland 8649
  - frost injury, increment, phenology, climatic change 7040
  - light, shade, photosynthesis 9662
  - mixtures, increment, Finland 3462

Simulation *cont.*
- *Pinus sylvestris cont.*
  - thinning, drainage, forest economics 9521
  - transpiration, climatic change, Sweden 4516
  - wind damage, Finland 6822
- *Pinus taeda*
  - branches, crown, USA 6187
  - crown, thinning, USA 5148
  - increment, stand development, USA 2707
  - site class assessment, USA 1823
  - stand density, logging, USA 3493
- plant physiology, *Pinus taeda* 3331
- plant succession
  - climatic change, Europe 8171
  - stand characteristics 5964
- pollen analysis, vegetation, history, palaeoecology, theory 2128
- *Populus,* photosynthesis, sampling 6826
- *Populus tremuloides,* stomatal resistance, gas exchange, Canada 801
- private forestry
  - forest management, carbon cycle, USA 3630
  - timber trade, marketing, USA 2777
- *Prosopis laevigata,* precipitation, canopy, Mexico 2398
- *Prosopis velutina,* riparian forests, hydrology, USA 1531
- *Pseudotsuga menziesii*
  - forest borders, air temperature, USA 2793
  - frost injury, cold hardening, USA 1888
  - increment, transpiration, Canada 3000
  - plant water relations, soil water, Netherlands 3568
- *Quercus*
  - plant water relations, soil water 7951
  - silviculture, wood properties, France 4588
- *Quercus coccifera,* forest fires, Portugal 7133
- *Quercus coccinea,* forest fires, garrigue, France 2921
- *Quercus robur,* autecology 3326
- rain forests
  - canopy, precipitation, erosion 8012
  - canopy gaps, population dynamics, Panama 5466
  - forest policy, nature conservation, Indonesia 6849
  - selection system, Australia, sustainability 4428
  - stand structure, Australia, site factors 3896
- reclamation, logging, smallwood 1541
- remote sensing
  - data banks 33
  - multispectral imagery, stand structure, Canada 8739
  - radar 4442
    - stand characteristics 9635
  - satellites, biomass production, vegetation types 3509
  - vegetation
    - change, rangelands 7853
    - phenology, Africa 9631
- riparian vegetation, forest management, forest economics, USA 3501
- *Salix viminalis,* plant water relations, seasonal variation, evapotranspiration, Sweden 3335
- savanna woodlands, plant succession, drought, Africa South of Sahara 4212
- savannas, evaporation 8511
- shrubs, forest fires, Portugal 7132
- silvicultural systems, selective felling, sustainability, Philippines 920
- soil chemistry
  - acid deposition, Europe 5338
  - acidification, air pollution, UK 7683
- soil water, increment 7680
- stand characteristics, canopy, wind, air flow 3534
- stand structure
  - canopy 7817
  - diameter, distribution 9580

- **Simulation** *cont.*
  - stand structure *cont.*
    - mixtures, Germany 9581
  - steppes, carbon cycle, climate, Russia 328
  - subalpine forests, forest management, planning, Sweden 9605
  - synecology
    - climate, USA, diurnal variation 1341
    - ecotones, North America 3061
  - tree breeding
    - breeding programmes, seedlings, clones, genetic variance 9967
    - heritability, selfing, inbreeding depression, dominance 2171
  - tropical forests, deforestation, climatic change 3557
  - vegetation
    - atmosphere
      - precipitation
        - India 9759
        - Tropics 9759
  - vegetation types
    - climatic change, Switzerland 7267
    - geographical distribution, climate, Russia 3938
    - remote sensing, UK 7850
  - weeds, *Pteridium aquilinum, Eucalyptus,* Australia 2508
  - wildlife
    - birds, cavities in trees, statistical analysis 2509
    - deciduous forests, stand characteristics, USA 4226
    - forest ecology, nature conservation 3279
    - forest management, multiple use, Australia 5020
    - habitats, *Quercus,* USA 4901
  - wind, USA, smoke, movement 3695
  - wind damage
    - Puerto Rico 2801
    - USA 2801
  - woody plants
    - geographical distribution, climate, USA 3070
    - plant colonization, *Juniperus* 3097
    - seeds, survival, fire effects 3330
- **Simulation models,** forest economics, nature conservation, valuation, Norway 5218
- ***Sinarundinaria,*** vegetative propagation, indigenous knowledge, Nepal 6883
- ***Sinarundinaria nagalandiana,*** bamboos, taxonomy, new species, plant morphology, India 7219
- **Singapore**
  - broadleaves
    - afforestation, reclaimed land 4095
    - photosynthesis 6467
    - plant nutrition, plant succession 4543
  - deforestation, nature conservation 3873
  - flora 3051
  - fungal diseases, *Fusarium oxysporum, Pterocarpus indicus* 8296
  - *Pterocarpus indicus,* plant diseases, lightning, bark 9857
  - rain forests, urban areas, nature reserves 10133
  - seed size, vegetation types, light relations 9882
  - vegetation types, foliage, pest resistance 6454
- ***Sinoxylon conigerum,*** insect pests, *Hevea brasiliensis,* Malaysia, wood chemistry, effects 6659
- ***Siparuna harlingii,*** taxonomy, South America 6518
- ***Siparuna palenquensis,*** taxonomy, Ecuador 6518
- ***Siphoneugena densiflora,*** reproductive behaviour, Brazil 3027
- ***Siphonodon celastrineus,*** taxonomy, India 2116
- ***Sirex noctilio***
  - insect pests
    - *Pinus*
      - Argentina, control 1494
      - forest plantations, Venezuela 6645
    - *Pinus radiata,* Australia, biological control 6660, 6664
    - *Pinus taeda,* Brazil, parasitoids 2364
- **Site class assessment**
  - *Abies balsamea*
    - boreal forests, Canada, site factors 9597
    - Canada 1008
  - *Abies pindrow,* silvicultural systems, soil chemistry, India 2815
  - *Acacia mearnsii,* soil depth, South Africa, statistical analysis 1002
  - climate, reclamation, eroded soils, choice of species, India 6705
  - conifers
    - forest plantations
      - Canada 8703
      - statistical analysis, Argentina 225
    - mixtures, yield forecasting, Canada 5177
  - equations
    - *Acacia mangium,* Indonesia 1829
    - conifers, USA 233
    - *Eucalyptus grandis,* increment, height, South Africa 7824
    - forest trees, height, growth models, Canada 4417
    - height, *Pinus resinosa,* USA 217
  - *Eucalyptus,* increment, volume, soil types, Uruguay 1003
  - *Fagus sylvatica,* synecology, Greece 1355
  - forest management, sustainability, information needs, growth models, India 5189
  - forest trees
    - equations, mathematics 2690
    - height, equations 1616
    - Slovenia 5175
    - stand density, USA 1839
  - height, equations, *Eucalyptus deglupta,* Indonesia 1832
  - history, Russia 7691
  - increment
    - *Pinus resinosa,* Canada 8702
    - statistical analysis 2706
    - theory 4409
  - *Larix decidua,* soil texture, USA, methodology 1842
  - *Picea abies*
    - Slovakia 6979
    - soil chemistry, topography, Sweden 2708
    - soil properties, Russia 5186
    - yield tables, air pollution, Germany 9602
  - *Picea glauca,* soil properties, ground vegetation, plant composition, Canada 8704
  - *Picea mariana*
    - Canada 1008
    - height, Canada, equations 1616
    - stand density, Canada, methodology 4399
  - *Picea sitchensis,* geographical information systems, UK 5180
  - *Picea smithiana,* silvicultural systems, soil chemistry, India 2815
  - *Pinus*
    - foliage, morphology, chemistry, Sweden 3745
    - increment, volume, soil types, Uruguay 1003
  - *Pinus contorta*
    - provenance trials
      - Canada 3367
      - Sweden 3367
  - *Pinus echinata,* height, USA 5178
  - *Pinus elliottii,* volume determination, USA, estimation 2686
  - *Pinus palustris,* simulation, USA 1006
  - *Pinus pinaster,* yield tables, Portugal 1844
  - *Pinus radiata*
    - geographical information systems, statistical analysis, New Zealand 4402
    - Italy, growth models, height, stand age 3486
  - *Pinus sylvestris*
    - drainage, Russia 231
    - Finland 6969
    - forest management, Ukraine 5185
- **Site class assessment** *cont.*
  - *Pinus sylvestris cont.*
    - soil chemistry, topography, Sweden 2708
    - understorey, botanical composition, Finland 9590
  - *Pinus taeda,* simulation, USA 1823
  - *Populus tremuloides,* Canada, equations, models 7820
  - *Pseudotsuga menziesii*
    - Canada 230
    - height, Italy 6181
    - increment, France 9543
    - soil chemistry, USA 1903
  - selection forests, site types, Switzerland 6967
  - shrubs, China 9600
  - site factors
    - *Pinus nigra,* France, yields 2702
    - *Pinus sylvestris,* mathematics, Russia 5187
  - site types, USA 1875
  - soil, maps, Argentina 1087
  - *Tectona grandis,* plant nutrition, West Africa, growth effects 4545
  - *Tsuga heterophylla*
    - soil chemistry
      - plant composition, Canada 8776
      - USA 1903
- **Site factors**
  - *Acacia,* phenology, climate, soil water, Australia 3707
  - amenity trees, climate, soil, adaptation, selection criteria 4984
  - *Casuarina collina,* geographical distribution, plant nutrition, New Caledonia 8887
  - *Cupressus sempervirens,* variety trials, plant morphology, Mediterranean Region 6020
  - deciduous forests, plant succession, USA 3096
  - *Eucalyptus,* biomass, Australia, theory 3332
  - *Eucalyptus saligna,* growth models, Cameroon 8701
  - geographical information systems, mapping, stand characteristics, composition, Norway 5021
  - *Gmelina arborea,* soil chemistry, nutrient deficiencies, Costa Rica 4546
  - *Gymnostoma,* geographical distribution, plant nutrition, New Caledonia 8887
  - *Larix laricina,* provenance trials, waterlogging, France 4257
  - mixed forests, plant succession, USA 3096
  - *Picea abies*
    - chromosome aberrations 6584
    - wood properties, growth models, quality 8863
  - *Picea glauca,* yield forecasting, Canada, plant height 3489
  - *Picea mariana,* direct sowing, seedbeds, Canada 4330
  - *Pinus,* forest plantations, natural regeneration, Japan 7772
  - *Pinus koraiensis,* selection criteria, Korea Republic 8206
  - *Pinus pinaster*
    - site preparation, fertilizers, Greece 7780
    - taper, Morocco 8862
  - *Pinus sylvestris,* forest litter, decomposition, climate, Sweden 4495
  - *Quercus,* silviculture, Belgium, wood properties 8860
  - sclerophyllous scrub
    - botanical composition
      - Australia 3077
      - South Africa 3077
- **Site preparation** (*see also* Stump removal)
  - *Abies pindrow,* weed control, artificial regeneration, Pakistan 5132
  - afforestation, forestry machinery, Italy, research 6118
  - burning
    - mycorrhizas, *Pinus,* Canada 7387
    - *Pinus echinata,* direct sowing, USA 4340

Site preparation *cont.*

- burning *cont.*
  - runoff, USA 5134
  - soil properties, coniferous forests, USA 9507
- chemical treatment, *Pinus taeda,* forest economics, USA 1873
- clear felling, altitude, soil water regimes, Canada 3447
- conifers
  - Canada, weed control, *Rubus parviflora* 163
  - plant nutrition, soil fertility, Canada 7793
- contour ridging, Ukraine 938
- controlled burning, Canada 8629
- *Cryptomeria japonica*
  - slash
    - soil chemistry
      - ions, Japan 7045
      - nitrogen, Japan 4339
- equipment, Canada 187
- *Eucalyptus nitens,* weed control, nitrogen-phosphorus fertilizers, Australia 3463
- *Fagus crenata,* natural regeneration, Japan, *Sasa kurilensis,* control 4346
- *Fagus sylvatica,* natural regeneration, seed banks, Denmark 7773
- feller bunchers, USA 4367
- forest plantations, Italy, runoff, erosion 7782
- forest trees, saline soils, reclamation, Australia 7715
- forestry machinery 5157
  - Canada 1792
  - scarifiers, disc cultivators, Canada 1795
  - tyres, Canada 4366
- *Gmelina arborea,* forest plantations, increment, Ghana 5131
- harrows, Canada, work study 9547
- herbicides
  - deciduous forests, natural regeneration, USA 4341
  - deer, *Alces alces,* USA 9229
  - *Pinus taeda*
    - natural regeneration, USA 4320
    - USA 3446
  - spraying equipment, Canada 2641
- implements, work study, Canada 8669
- logging, carbon cycle, conferences 4175
- mechanical methods
  - *Pinus elliottii,* old fields, USA, pest control 6927
  - wildlife, Canada 10074
- multipurpose trees, afforestation, fertilizers, Indonesia 7781
- *Nothofagus solandri,* seedlings, drought injury, New Zealand 6297
- pesticides, *Pseudotsuga menziesii,* seedling growth, mortality, USA 3589
- *Picea,* artificial regeneration, planting, Canada 9508
- *Picea abies*
  - clear felling, artificial regeneration, Sweden 9541
  - natural regeneration, soil amendments, France 9492
  - Russia 1751
  - slash, cycling, Sweden 3445
  - water stress, planting stock, Sweden 9681
- *Pinus,* stand establishment, increment, Sweden 9504
- *Pinus contorta,* controlled burning, artificial regeneration, Canada 8880
- *Pinus pinaster,* site factors, fertilizers, Greece 7780
- *Pinus radiata*
  - artificial regeneration
    - soil chemistry, plant nutrition, South Africa 180
    - soil organic matter, South Africa 181
    - trials, soil physics, South Africa 179
  - increment, slash, Australia 6119
- *Pinus strobus,* controlled burning, plant physiology, USA 1270

Site preparation *cont.*

- *Pinus sylvestris*
  - direct sowing, seedling emergence, soil water, Sweden 6111
  - shelterwood system, natural regeneration, Poland 6918
  - slash, cycling, Sweden 3445
- *Pinus taeda,* plant competition, USA 3444
- planting, productivity, slash 6117
- *Populus tremuloides,* natural regeneration, forest litter, Canada 3434
- scarification, *Betula papyrifera,* natural regeneration, USA 939
- scarifiers, Sweden, work study 9551
- slash, burning, *Pinus radiata,* soil chemistry, Chile 1750
- soil physics, temperature, Sweden 9506
- soil temperature, Finland 7779
- tillage, *Pinus radiata,* weed control, South Africa, botanical composition 9505

Site requirements

- forest plantations, guidelines 9483
- forest trees, soil chemistry, base saturation, Germany 9695
- *Juglans,* provenance trials, UK 2543
- tides, mangroves, *Nypa fruticans,* afforestation, Bangladesh 7776
- woody plants, plant succession, old fields 3102

Site types

- acid deposition, Germany 8846
- air pollution, Germany 8846
- classification, site class assessment, USA 1875
- deciduous forests, France, analysis 1362
- degraded forests, increment, amelioration of forest sites, Poland 4089
- forest inventories, USA, statistical analysis 2727
- Germany, books 4162
- maps, silviculture, Germany 9639
- *Picea abies,* roots, systems, Russia 8060
- *Pinus sylvestris,* forest plantations, biomass, distribution, Russia 232
- *Populus,* choice of species, Russia 65
- *Quercus emoryi,* natural regeneration, USA 7325
- site class assessment, selection forests, Switzerland 6967
- soil parent materials, mapping, Germany 9708
- vegetation types, Germany 4769

Sitta europaea, birds, deciduous forests, fragmentation, Belgium 7514

Skidding, planning, Germany 1176

Slash

- burning, *Pinus pinaster,* clear felling, soil chemistry, South Africa 4613
- *Cryptomeria japonica*
  - site preparation
    - soil chemistry
      - ions, Japan 7045
      - nitrogen, Japan 4339
- *Picea abies,* site preparation, cycling, Sweden 3445
- *Pinus radiata,* increment, site preparation, Australia 6119
- *Pinus sylvestris*
  - France, disposal, costs 6928
  - site preparation, cycling, Sweden 3445
- wood chips, *Pinus,* soil amendments, soil chemistry, Spain 6071

Sloanea berteriana, rain forests, wind damage, Puerto Rico 3561

Sloanea woollsii, plant water relations, water uptake, Australia 7944

Slopes

- *Abies sachalinensis,* thinning, geographical information systems, Japan, planning 6934
- afforestation, measurement, instruments, India 1791
- *Chamaecyparis obtusa,* root systems, Japan, erosion control 5839
- forest roads, Japan, planning 6194
- forest trees, root systems, Japan, stability 4600
- landslides, soil movement 1896

Slopes *cont.*

- soil water movement, hydrology, Japan 8769

Slovakia

- *Abies alba*
  - air pollution, foliage 9742
  - foliage, mesophyll, ultrastructure, frost resistance 7150
  - genetic variation, isoenzymes, population genetics 8218
  - pollen germination, air pollution 488
  - riparian forests 519
  - seed set, air pollution 488
- allelopathy, research 7320
- bottomland forests, hydrology, forest management 5832
- coniferous forests
  - ground vegetation 7303
    - biomass 9011
- conifers, ground vegetation, biomass 9946
- economics, forest management, textbooks 10
- *Fagus sylvatica*
  - buds, dormancy, phenology, stand density 7145
  - dendroclimatology, increment 10158
  - fungi, thinning 7383
  - synecology, botanical composition 7273
- forest economics, forest policy 2774
- forest influences, watersheds, hydrology, simulation 5835
- forest trees
  - air pollution
    - foliage, chemistry 9745
    - sulfates, seasonal variation 7087
  - phenology 7144
  - roots, biomass 6964
  - soil fungi, keratinophilic fungi 1922
- fungal diseases
  - *Cryphonectria parasitica, Castanea sativa,* biological control 8321
  - *Laetiporus sulphureus,* spore dispersal 5630
- insect pests, *Bruchophagus sophorae, Sophora japonica,* seeds, damage 838
- *Larix decidua,* pollen, amino acids 3750
- mixed forests, air pollution, forest ecology 5329
- mountain forests, soil types, forest management, monographs 45
- *Picea abies*
  - air pollution, foliage, damage 9741
  - coniferous forests 3932
  - roots, biomass, air pollution 7151
  - site class assessment 6979
- *Pinus,* pollen germination, air pollution 7212
- *Pinus mugo*
  - biomass, synecology 7302
  - forests, synecology 521
- *Salix helvetica,* vegetation types, synecology 520
- *Salix silesiaca,* synecology 6550
- *Taxus baccata,* silvicultural systems, stand development 6909
- *Tilia cordata,* riparian forests 519
- wildlife, birds, forest trees 10078

Slovenia

- *Abies alba,* flowering, forest decline 9862
- afforestation, history 2476
- costs, forestry workers 7710
- *Fagus sylvatica*
  - stand structure, nature reserves 2682
  - thinning, increment 5149
- forest borders, management, ecology 2717
- forest management
  - nature conservation 2630
  - sustainability, multiple use 5025
- forest ownership 5024
- forest trees, site class assessment 5175
- insect pests
  - *Ips typographus, Picea abies,* control 3190
  - population dynamics 5680
- mountain forests, synecology, altitude 5444

- **Slovenia** *cont.*
  - *Picea abies*
    - air pollution, seed germination, chromosome aberrations 5335
    - forest plantations
      - plant nutrition, seedling growth 5126
      - volume determination, old fields 2683
    - plant succession, forest fires 5459
    - progeny testing 5476
  - *Quercus,* forest plantations, pseudogleys, increment 2695
  - *Quercus robur,* taxonomy 8974
  - remote sensing, image interpretation, forest management 5201
- **Small mammals**
  - rain forests, Brazil, population ecology 9215
  - vegetation types, USA 9224
  - wildlife
    - boreal forests, air pollution, Russia 8370
    - clear felling, North America, ecology 3193
    - forest management, USA 7517
    - rain forests, Chile, habitats 7524
    - USA, ecology 7518
- ***Smilax aspera,*** seed dispersal, Formicidae, Italy 3830
- ***Smithtonia jonesii,*** foliage, morphology, palaeobotany, taxonomy, Australia 497
- ***Smithtonia lanceolata,*** foliage, morphology, palaeobotany, taxonomy, Australia 497
- ***Smithtonia victoriensis,*** foliage, morphology, palaeobotany, taxonomy, Australia 497
- **Snails,** *Dacryodes excelsa,* canopy gaps, Puerto Rico 1474
- **Snow**
  - *Acer saccharum,* soil water, freezing, forest decline, Canada 2811
  - broadleaves, stem form, Japan, resistance 2954
  - control, shelterbelts, China 8381
  - *Cryptomeria japonica,* natural layering, light, Japan 4326
  - evaporation
    - forest influences, Germany 4933
    - *Picea abies,* canopy, Sweden, measurement 2905
  - *Picea sitchensis,* air pollution, deposition, UK 333
  - *Pseudotsuga menziesii,* urea fertilizers, Canada, application methods 4301
  - synecology, avalanches, USA 2911
- **Snow cover**
  - *Betula tortuosa,* Sweden, indicator species 1877
  - *Fagus crenata*
    - seedlings, natural regeneration, Japan, vertebrate pests 6252
    - seeds, natural regeneration, Japan, vertebrate pests 6252
  - forest trees, soil air, carbon dioxide, Japan 8768
- **Snow damage**
  - *Abies alba,* stems, Italy 280
  - broadleaves, coppice, stand structure, Japan 6267
  - Finland 5232
  - forest trees, USA 4483
  - insect pests
    - Coleoptera
      - *Picea abies,* Sweden, susceptibility 10045
      - *Pinus sylvestris,* Sweden, susceptibility 10045
  - *Picea abies,* forest decline, Germany 9864
  - *Pinus sylvestris,* thinning, fertilizers, wind damage, Sweden 3560
  - *Thujopsis dolabrata,* stem form, roots, Japan, plant morphology 4631
- **Social forestry**
  - Asia, deforestation, theory 10120
  - *Casuarina equisetifolia,* forest economics, India 10119
  - development projects
    - erosion control, Nepal, economics 728
    - India 4120, 8437
- **Social forestry** *cont.*
  - development projects *cont.*
    - India *cont.*
      - books 730
  - *Eucalyptus,* development projects, choice of species, India 6737
  - forest management, participation, India 3495
  - forest policy, India 5036
  - fuelwood
    - resources
      - rural development
        - India
          - books 7628
          - constraints 7628
  - multipurpose trees, minor forest products, India, conferences 14
  - participation
    - development projects, India 4122
    - poverty, development projects, Indonesia 7585
  - Vietnam, periodicals 9316
- **Socioeconomics**
  - agroforestry
    - history, Developing Countries 5886
    - Rwanda 10110
  - *Casuarina equisetifolia,* social forestry, India 10119
  - deforestation, Developing Countries 4103
  - forest management, development projects, Burkina Faso 8538
- **Sociology**
  - *Pinus densiflora*
    - plant succession
      - landscape
        - Japan 7292
        - Korea Republic 7292
- ***Socratea exorrhiza,*** height, foliage, morphology, Costa Rica 5376
- **Soil**
  - *Abies nordmanniana,* herbicides, residues, Denmark 8797
  - acidification
    - *Abies balsamea,* coniferous forests, USA 1170
    - *Picea abies,* acid deposition, plant composition, metals 4541
    - *Picea rubens,* coniferous forests, USA 1170
  - amenity trees, site factors, climate, adaptation, selection criteria 4984
  - boreal forests, land classification, mapping, Russia 5210
  - denitrification, conifers, nitrogen cycle, Europe, measurement 3575
  - erosion, Italy 708
  - *Eucalyptus camaldulensis,* natural regeneration, India 151
  - forests
    - nitrogen cycle
      - air pollution, reviews 1953
      - global warming, reviews 1953
  - maps, site class assessment, Argentina 1087
  - mineralization, *Eucalyptus,* phosphorus fertilizers, Australia 5110
  - minerals, *Picea abies,* drought, wood anatomy, Germany 2897
  - nitrification, *Elaeagnus angustifolia,* allelopathy, forest litter 1897
  - nitrogen, mineralization, conifers, forest litter, Canada 6288
  - nutrients, *Cunninghamia lanceolata,* forest influences, China 8017
  - savannas, topography, Mali 3922
  - steppes, land classification, mapping, Russia 5210
  - water erosion, Sicily, losses, mapping 704
- **Soil acidity**
  - forest soils, humus, Norway 9692
  - *Picea abies,* acid deposition, nitrogen 5336
  - rain forests, deforestation, India 5865
- **Soil air**
  - carbon dioxide
    - emission, dead trees, volcanoes, USA 8874-8875
    - forest trees, snow cover, Japan 8768
  - methane, emission, peatlands, drainage, Canada 9510
- **Soil air** *cont.*
  - rain forests, forest influences, Costa Rica, nitric oxide 8873
  - soil compaction, methodology, radon 779, 5948-5949
  - street trees, plant nutrition, tree injection, nutrients, UK 10143
  - wetlands, drainage, Finland 7783
- **Soil amendments**
  - calcium, *Picea abies,* forest decline, France, rhizosphere fungi 2228
  - composts, paper mill sludge, *Populus,* USA 7764
  - dolomite, *Picea abies,* soil chemistry, Germany, soil solution 3412
  - *Eucalyptus tereticornis,* forest plantations, soil types, India 883
  - forest trees, plant nutrition, soil chemistry, logging, conferences 770
  - lime
    - broadleaves, seed banks, USA 6898
    - conifers, watersheds, soil chemistry, UK 3414
    - *Picea abies*
      - roots, soil chemistry, Sweden 9460
      - soil biology, Germany 7760
    - *Pinus sylvestris,* roots, soil chemistry, Sweden 9460
  - magnesium, *Picea abies,* forest decline, France, rhizosphere fungi 2228
  - *Picea abies*
    - natural regeneration, site preparation, France 9492
    - roots, Sweden 3419
  - *Pinus,* slash, wood chips, soil chemistry, Spain 6071
  - wood ash
    - *Eucalyptus,* soil chemistry, Australia 1096
    - *Picea abies,* soil biology, soil chemistry, Sweden 893
- **Soil analysis,** cations, forests, acid soils, rhizosphere 5236
- **Soil arthropods,** *Acer saccharum,* mycorrhizas, seedlings, forest litter, pot experimentation 8262
- **Soil bacteria**
  - insecticides, biodegradation, Japan 1925
  - seasonal variation, *Alnus glutinosa,* rhizosphere, nitrogen cycle, Spain 1923
  - seed inoculation, seed germination, *Tsuga heterophylla,* seedling growth 6085
- **Soil biology**
  - *Acer pseudoplatanus,* rhizosphere, enzymes, root systems, UK 5274
  - air pollution, carbon dioxide enrichment, reviews 6295
  - algae, broadleaves, Ukraine, forest steppe 1106
  - arthropods, *Acer saccharum,* mycorrhizas, Canada 7928
  - *Betula pendula,* forest litter, soil chemistry, heavy metals, Finland 7934
  - broadleaves, soil chemistry, nitrogen, USA 307
  - Coleoptera
    - coniferous forests, China 8800
    - mixed forests, China 8800
  - Collembola, conifers, forest litter, decomposition, Japan 8799
  - conferences 7642
  - coniferous forests, soil organic matter, Finland 7939
  - conifers, air pollution, soil chemistry, Netherlands, nitrogen 5318
  - cycling, soil chemistry, Germany 7049
  - enzymes, forest trees, forest plantations, India, seasonal variation 7940
  - *Fagus sylvatica*
    - canopy gaps, Germany 7937
    - forest litter, decomposition, Germany 7910
  - forest trees, roots, carbon dioxide enrichment, simulation 6263
  - forests, air pollution, heavy metals, Poland 343
  - mangrove forests, crabs, Australia 7058
  - microorganisms
    - aggregates, forest influences, India 8803

- **Soil biology** *cont.*
  - microorganisms *cont.*
    - biomass, forest soils, Japan 7932
    - deciduous forests, wetlands, USA 306
    - *Eucalyptus pauciflora,* forestry practices, Australia 7927
    - *Fagus sylvatica* 7931
      - canopy gaps, Germany 7936
      - carbon cycle, nitrogen cycle, Germany 7933
    - forest trees, rhizosphere, Cuba 1107
    - *Picea abies*
      - calcium fertilizers, Finland 5109
      - nitrogen-phosphorus fertilizers, Finland 5109
    - *Pinus,* controlled burning, Spain 8883
  - mycorrhizas
    - *Picea abies,* natural regeneration, allelopathy, humus 5270
    - *Pinus,* Russia, seasonal variation, fertilizers 8802
  - Oligochaeta
    - *Fagus sylvatica* 7931
      - humus, France, variation 7877
    - USA 7929
  - *Picea abies*
    - fertilizers
      - Austria 136
      - Finland 5276
    - forest litter, decomposition, nutrients, Denmark 5256
    - forestry practices, Finland 5273
    - humus, altitude, France 3588
    - lime, Germany 7760
    - soil amendments, wood ash, soil chemistry, Sweden 893
  - *Picea sitchensis,* rhizosphere, enzymes, root systems, UK 5274
  - *Pinus halepensis,* humus, Spain 1102
  - *Pinus resinosa,* gas exchange, ground vegetation, Canada 7128
  - *Pinus sylvestris,* carbon dioxide enrichment, Finland 7935
  - *Pseudotsuga menziesii,* planting, soil treatment, USA 3156
  - *Quercus havardii*
    - seedling growth
      - USA
        - Formicidae 5272
        - mycorrhizas 5272
  - *Quercus ilex,* Collembola, Spain 1921
  - respiration, forests, India 6294
  - soil fauna, Collembola, *Fagus sylvatica,* forest litter, soil chemistry, Austria 4504
- **Soil chemistry**
  - *Abies alba*
    - acid deposition, simulation, plant composition 2889
    - fertilizers, lime, mycorrhizas, Romania 1715
  - *Acacia,* biomass production, plant composition, India 2699
  - *Acacia tortilis,* stand structure, forest influences, Sudan 4598
  - *Acer saccharum*
    - fertilizers, cycling, Canada 888
    - forest decline, plant composition, USA 9860
  - acid deposition
    - Austria 335
    - cycling, simulation, USA 3666
    - hydrology, Sweden, simulation 1905
    - simulation
      - Europe 5338
      - Scandinavia 8510
  - acidification
    - air pollution, simulation, UK 7683
    - clay minerals, forest trees, Sweden 291
    - deciduous forests, runoff, USA 3574
    - forest trees, stemflow, pH, Japan 1992
    - *Picea rubens,* acid deposition, simulation 345
    - seasonal variation, *Picea abies,* Germany, simulation 7978
  - afforestation, forest influences, streams, chemistry, UK 10083
  - air pollution, nitrogen cycle, Europe, nitrogen, saturation 5322-5323
- **Soil chemistry** *cont.*
  - *Alnus glutinosa,* groundwater, geographical information systems, Germany 8163
  - alpine vegetation, air pollution, throughfall, Europe 5321
  - aluminium, forest decline, plant nutrition, France, reviews 4717
  - *Avicennia marina,* natural regeneration, soil salinity, light, Australia 3883
  - bacterial insecticides, nontarget effects, laboratory tests 1498
  - base saturation, forest trees, site requirements, Germany 9695
  - boreal forests, Canada 1906
  - *Brachystegia manga,* savanna woodlands, natural regeneration, Zambia, charcoal 5239
  - broadleaves
    - air pollution, runoff, Norway, nitric acid 5320
    - forest influences, Belgium, site factors, classification 8999
    - forest litter, aspect, Australia 2817
    - savannas, ecotones, Australia 3087
  - calcium fertilizers, dosage, equations 891
  - carbon
    - broadleaves, seed germination, seedling growth, Zambia 5239
    - Tropics, estimation, techniques 5008
  - cation exchange, *Acer saccharum,* nutrient deficiencies, Canada 7972
  - cation exchange capacity, forest trees, Canada 5250
  - cations, *Cryptomeria japonica,* Japan 1094
  - *Ceanothus velutinus,* forest influences, USA 8780
  - clear felling, cycling, streams, USA 2907
  - coniferous forests
    - acid deposition, Sweden 344
    - air pollution, throughfall, Europe 5321
    - stand age, USA 8774
  - conifers
    - afforestation
      - Germany 9764
      - UK 5353
    - air pollution
      - soil biology, Netherlands, nitrogen 5318
      - Sweden, nitrates, soil solution 5246
      - throughfall, Sweden, nitrates 5245
    - biogeochemistry, acid deposition, throughfall, Europe 3664
    - forest fires, USA 2918
    - Japan, nitrogen, mineralization 4487
    - watersheds, soil amendments, lime, UK 3414
  - *Cryptomeria japonica*
    - acidification, growth 7048
    - forest influences, carbon cycle, Japan 7047
  - cycling, soil biology, Germany 7049
  - *Dacryodes excelsa,* wind damage, simulation, Puerto Rico 1071
  - deciduous forests
    - dendrochronology, climate, Canada 4142
    - nutrient deficiencies, USA, methodology 4191
  - deforestation, soil organic matter, Costa Rica 290
  - *Eucalyptus*
    - soil amendments, wood ash, Australia 1096
    - vegetation types, Australia, soil fertility 7272
  - *Eucalyptus camaldulensis,* provenance trials, forest influences, India 66
  - *Eucalyptus globulus,* roots, irrigation, fertilizers, Portugal 8767
  - *Eucalyptus regnans,* basal area, foliage, New Zealand 4394
  - *Eucalyptus tereticornis,* forests, India, statistical analysis 1901
  - eutrophication
    - acidification
      - *Fagus sylvatica,* ground vegetation, France 3090
- **Soil chemistry** *cont.*
  - eutrophication *cont.*
    - acidification *cont.*
      - *Quercus petraea,* ground vegetation, France 3090
  - exchangeable cations, *Fagus sylvatica,* ground vegetation, Sweden 7885
  - *Fagus sylvatica*
    - fertilizers, plant residues, Germany 892
    - forest litter, Collembola, Austria 4504
  - fens, groundwater, botanical composition, Germany 8163
  - forest decline, plant nutrition, interactions 3820
  - forest litter, decomposition, forest influences, Portugal 8026
  - forest plantations, forest influences, lateritic soils, India 8023
  - forest trees
    - acid deposition, stemflow, Japan 7999
    - Australia, aluminium, growth 3573
    - fertilizers, irrigation, Poland 137
    - forest influences, USA 5360
    - nutrient uptake
      - calcium, models 3627
      - magnesium, models 3627
    - plant nutrition
      - fertilizers, logging, conferences 770
      - soil amendments, logging, conferences 770
    - uprooting, USA 8869
  - forests, cycling, forest litter, Tropics 3634
  - gas exchange
    - clear felling, Puerto Rico 1070
    - wind damage, Puerto Rico 1070
  - *Gmelina arborea,* nutrient deficiencies, site factors, Costa Rica 4546
  - heavy metals
    - *Betula pendula,* forest litter, soil biology, Finland 7934
    - forests, Germany 288
    - *Pinus taeda,* air pollution, ozone, acid deposition 8003
  - humic acids, forest soils, soil fertility, India 286
  - humus, *Pinus densiflora,* plant succession, Japan 7883
  - ions, *Cryptomeria japonica,* site preparation, slash, Japan 7045
  - *Julbernardia globiflora,* savanna woodlands, natural regeneration, Zambia, charcoal 5239
  - *Larix decidua,* broadleaves, natural regeneration, Germany 8660
  - *Larix sibirica,* forest influences, USA 8791
  - leaching, forest trees, sewage, USA 896
  - *Leucaena leucocephala,* agroforestry, green manures, Kenya 3257
  - mangroves, Brazil 1092
  - metals, *Pseudotsuga menziesii,* acid deposition, Netherlands 7892
  - *Metrosideros polymorpha,* plant nutrition, Hawaii, chronosequences 6287
  - mixed forests, logging, controlled burning, USA 9689
  - mountain forests, air pollution, heavy metals, USA 342
  - nitrates
    - *Acer saccharum,* soil temperature, Canada 9694
    - *Alnus rubra,* USA 3577
    - forests
      - indicator plants
        - methodology 24
        - seasonal variation 24
    - *Picea abies,* indicator plants, Sweden, seasonal variation 24
    - *Pseudotsuga menziesii,* USA 3577
  - nitrogen
    - *Boswellia serrata,* roots, India 5303
    - *Cryptomeria japonica,* site preparation, slash, Japan 4339
    - forest trees, foliage, chemistry, USA 3576
    - mineralization
      - broadleaves, soil biology, USA 307

Soil chemistry *cont.*
- nitrogen *cont.*
  - mineralization *cont.*
    - forest trees, Costa Rica 5247
    - nitrogen fixing trees, Costa Rica 5247
  - phosphorus, rain forests, Venezuela 5357
  - *Picea abies,* Scandinavia 7888
  - *Pinus contorta,* canopy gaps, size, USA 1143
  - *Pinus sylvestris,* aspect, Spain 7889
  - *Pseudotsuga menziesii*
    - forest litter, Canada 9706
    - site class assessment, USA 1903
  - seasonal variation, *Casuarina equisetifolia,* forest plantations, India 356
  - *Tsuga heterophylla,* site class assessment, USA 1903
- nitrogen cycle, USA 7887
- nitrogen leaching, fertilizers, Austria 7759
- nutrients
  - *Abies pindrow,* silvicultural systems, site class assessment, India 2815
  - *Acacia aneura,* woodlands, landscape, Australia 9002
  - availability, *Picea abies* 8872
  - *Eucalyptus microtheca,* irrigated stands, Kenya 6371
  - *Juniperus occidentalis,* forest influences, USA 6372
  - leaching, forest fires 384
  - *Leucaena leucocephala,* forest litter, decomposition, Indonesia 1908
  - *Picea abies,* forest plantations, Canada 5358
  - *Picea smithiana,* silvicultural systems, site class assessment, India 2815
  - *Pinus pinaster,* clear felling, burning, South Africa 4613
  - *Pinus resinosa,* forest plantations, Canada 5358
  - *Prosopis juliflora,* irrigated stands, Kenya 6371
  - secondary forests, Brunei Darussalam 7055
- phosphorus
  - *Bactris gasipaes,* seedling growth 2250
  - *Metrosideros polymorpha,* forest litter, USA 7882
  - *Quassia simarouba,* sex, forest influences, Costa Rica 5350
- *Picea abies*
  - air pollution
    - Denmark, ammonium nitrate 5244
    - nutrient deficiencies, Germany 9755
    - throughfall
      - Czech Republic 2863
      - Germany, nitrogen 5241
  - defoliation, nutrient deficiencies, Germany, phosphorus 1126
  - forest decline
    - fertilizers, plant nutrition, France 4302
    - France, soil water 4488
  - liming, roots, Sweden 9460
  - nitrogen cycle, ground vegetation, Sweden, methodology 1145
  - nutrient deficiencies
    - magnesium, Germany 7057
    - magnesium fertilizers, Germany 132
    - USA 2848
  - nutrient uptake, methodology 7647
  - old fields, stand development, Norway 7890
  - rhizosphere, roots, distribution, Sweden 9684
  - root systems, fertilizers, rhizosphere, Sweden 7749
  - soil amendments, dolomite, Germany, soil solution 3412
  - soil biology, soil amendments, wood ash, Sweden 893
- *Picea glauca,* forest litter, decomposition, USA 7903

Soil chemistry *cont.*
- *Picea rubens*
  - forest decline
    - acid deposition
      - plant nutrition, aluminium 1141
      - USA 1169
- *Picea sitchensis*
  - air pollution
    - plant water relations, UK, nitrates 5243
    - throughfall, UK, nitrates 5242
  - clear felling, UK 7127
  - forest plantations, forest influences, UK 360
- *Pinus*
  - natural regeneration, forest fires, USA 381
  - soil amendments, slash, wood chips, Spain 6071
- *Pinus contorta,* plant nutrition, biomass, USA 9730
- *Pinus elliottii,* fertilizers, USA, persistence 2618
- *Pinus jeffreyi,* forest influences, USA 8780
- *Pinus pinaster,* forest fires, fire effects, Spain 8035
- *Pinus radiata*
  - agroforestry, New Zealand 4958
  - artificial regeneration, site preparation, plant nutrition, South Africa 180
  - Australia, carbon, nitrogen 7884
  - site preparation, slash, Chile 1750
- *Pinus sylvestris*
  - air pollution, Netherlands, nitrogen, sulfur 3665
  - clear felling, Sweden, nitrogen, leaching 7044
  - fertilizers, clear felling, denitrification, Sweden 1095
  - humus, ground vegetation, plant succession, Netherlands 6280
  - liming, roots, Sweden 9460
  - peatlands, drainage, Finland 3571, 9509
  - root exudates, Russia 4604
- *Pinus taeda,* flooding, sea water, USA 1069
- plant nutrition, reviews, aluminium, calcium 6315
- *Populus deltoides,* forest influences, USA 8791
- *Populus tremula,* epiphytes, bark, chemistry, Sweden 8168
- *Pseudotsuga menziesii*
  - fertilizers, sewage, USA 894
  - increment, nitrogen fertilizers, USA 3418
  - roots, respiration 4707
- *Quercus*
  - forest decline, air pollution, plant nutrition, Austria 5309
  - India 1902
- *Quercus petraea,* mycorrhizas, forest decline, Romania 8773
- *Quercus robur,* plant nutrition, minerals, Netherlands 320
- rain forests
  - forest influences, Australia 5248
  - forest litter, hurricanes, Puerto Rico 6292
- redox potential, mangrove forests, flooding, USA 3937
- *Robinia neomexicana,* soil parent materials, USA, forest influences 3694
- seasonal variation, mixed forests, Austria 7886
- serpentine soils, *Picea glehnii,* nutrient uptake, nutrient deficiencies, Japan 7046
- *Shorea robusta,* forests, India, statistical analysis 1901
- silicon, rain forests, Tropics 8778
- soil formation, logging, New Zealand, *Pinus radiata* 1097
- soil organic matter
  - *Eucalyptus grandis,* Zimbabwe, forest litter, soil fertility 2812

Soil chemistry *cont.*
- soil organic matter *cont.*
  - *Pinus patula,* Zimbabwe, forest litter, soil fertility 2812
  - *Pseudotsuga menziesii,* site class assessment, USA 1903
  - savanna woodlands, Zimbabwe, forest litter, soil fertility 2812
  - *Tsuga heterophylla,* site class assessment, USA 1903
- soil pH, ground vegetation, Belgium 9691
- soil surveys, Germany 9696, 9698
- sulfur
  - *Fagus grandifolia,* deciduous forests, USA 8775
  - losses, coniferous forests, Canada 7891
- *Tectona grandis,* forests, India, statistical analysis 1901
- thinning, Argentina 177
- topography
  - *Picea abies,* site class assessment, Sweden 2708
  - *Pinus sylvestris,* site class assessment, Sweden 2708
- tropical forests, India 6279
- *Tsuga heterophylla,* site class assessment, plant composition, Canada 8776
- vesicular arbuscular mycorrhizas, *Acer saccharum,* forest decline, USA 10001
- weathering
  - *Picea,* UK 1904
  - *Pinus sylvestris,* UK 1904
  - soil organic matter, *Pinus,* Sweden 292
- woodlands, forest litter, Israel 5257

Soil classification
- forest plantations, soil fertility, New Zealand 6366
- forest soils, Russia 5267
- humus, France, systems 1918
- Korea Republic 5265-5266
- soil types, soil formation, France 1104

Soil compaction
- boreal forests, forestry practices, tillage, Canada 1089
- conifers, direct sowing, Canada 2634
- *Eucalyptus grandis,* seedling growth 6277
- soil air, methodology, radon 779, 5948-5949

Soil conservation
- afforestation, hydrology, India 2401
- agroforestry, Philippines 8435
- *Leucaena leucocephala,* agroforestry, water conservation, India 5875
- *Populus tremula,* afforestation, soil water retention, China 5841
- protection forests, books 5926
- reclamation
  - mine spoil, water conservation, India 713
  - water conservation, China 10082
- shifting cultivation, water conservation, Sri Lanka 6731
- watershed management, reclamation, water conservation, India 2395

Soil cultivation (*see* Tillage)

Soil degradation
- *Cassia siamea,* planting, nitrogen-phosphorus fertilizers, India 8627
- hill land, shifting cultivation, deforestation, land use, India 10087
- soil compaction, forest trees, selective felling, Sabah, logging effects 8771

Soil density
- broadleaves, logging, damage, USA 2895
- clear felling, tractors, USA, damage 2810
- forests, Finland 5238

Soil depth, *Acacia mearnsii,* site class assessment, South Africa, statistical analysis 1002

Soil enzymes
- *Pinus taeda*
  - acid deposition
    - air pollution
      - ozone
        - plant nutrition 9738
        - seedling growth 9738

Soil erosion (*see* Erosion)

Soil fauna
- arthropods
  - *Chamaecyparis obtusa,* forest influences, Japan 9714
  - *Pinus densiflora,* forest influences, Japan 9714
  - *Quercus,* forest influences, Japan 9714
- broadleaves, forest litter, USA 1924
- *Chamaecyparis obtusa,* forest litter, decomposition, Japan 6282
- composition, coniferous forests, Canada 3591
- Diplopoda
  - *Acioa barteri,* pruning trash, decomposition, Nigeria 5262
  - *Gliricidia sepium,* pruning trash, decomposition, Nigeria 5262
  - *Leucaena leucocephala,* pruning trash, decomposition, Nigeria 5262
- Formicidae, forest ecology, forest litter, Costa Rica 5676
- Oligochaeta
  - *Acer saccharum,* forest decline, Canada 5275
  - *Acioa barteri,* pruning trash, decomposition, Nigeria 5262
  - *Gliricidia sepium,* pruning trash, decomposition, Nigeria 5262
  - *Leucaena leucocephala,* pruning trash, decomposition, Nigeria 5262
  - *Populus tremuloides,* Canada, growth 4502
- *Pinus radiata,* irrigation, sewage effluent, New Zealand 7938
- sclerophyllous forests, controlled burning, Australia 6376
- vegetation types, Isoptera, Nigeria 8801

Soil fertility
- *Acacia,* biomass production, plant composition, India 2699
- *Acacia erubescens,* canopy, woodland grasslands, South Africa 359
- agroforestry
  - choice of species, root systems, plant competition 10100
  - crops 10099
  - plant competition, Tropics, simulation 4107
- biomass production, forest management 7924
- broadleaves
  - forest influences, savannas, Zimbabwe 6369
  - photosynthesis, Guyana 7193
  - seedlings, phenology, carbon dioxide enrichment, temperature 7864
- *Combretum apiculatum,* canopy, woodland grasslands, South Africa 359
- conifers
  - plant nutrition, forestry practices, Canada 7793
  - silvicultural systems, France 9711
- *Cunninghamia lanceolata,* forest plantations, China 8018
- cycling, bogs 7976
- deciduous forests, cycling, understorey, USA 3619
- *Faidherbia albida*
  - forest influences, Niger 1919
  - increment, variation, agroforestry, Niger 3275
- forest management, site factors 7923
- forest plantations, soil classification, New Zealand 6366
- forest soils, soil chemistry, humic acids, India 286
- forest trees
  - ground vegetation, plant competition, roots, theory 3875
  - provenance trials, drought resistance, Israel 6013
- insect pests, *Dioryctria albovittella, Pinus edulis,* mycorrhizas, interactions 4014
- multipurpose trees, farm forestry, India 2902

Soil fertility *cont.*
- *Parkia biglobosa*
  - canopy
    - mycorrhizas
      - Burkina Faso 10101
      - Nigeria 10101
- *Peronema canescens,* choice of species, Indonesia 825
- phosphorus, *Acacia,* woody weeds, seedling growth, South Africa 2646
- *Picea abies,* air pollution, nitrogen, yield forecasting, Sweden 7981
- *Picea rubens,* photosynthesis, seedling growth, carbon dioxide enrichment, plant water relations 1293
- *Pinus pinaster,* mixed forests, forest management, Spain 1190
- *Pinus radiata,* forest litter, plant composition, Australia 5117, 5268
- *Populus canadensis,* carbon dioxide enrichment, USA 5228
- *Populus deltoides,* agroforestry, India 2413
- *Pseudotsuga menziesii,* fertilizers, USA, DRIS 8794
- *Quercus suber,* mixed forests, forest management, Spain 1190
- rain forests, species diversity, Peninsular Malaysia 1379
- vegetation types
  - cycling, soil organic matter, sustainability 5269
  - foliage, morphology, plant nutrition, Peninsular Malaysia 6551

Soil flora, bacterial insecticides, nontarget effects, laboratory tests 1498

Soil formation
- chernozems, Russia 8789
- forest soils, Russia, reviews 5258
- forest trees, Denmark, weathering 8016
- *Juniperus sabina,* plant colonization, Russia 1103
- mangrove forests
  - plant succession
    - seral stages
      - Bangladesh 284
      - India 284
- *Pinus*
  - forest plantations, Croatia 4602
  - Italy 8783
- plant succession, theory 4790
- *Quercus,* Italy 8783
- rain forests, mountain forests, USA 8787
- soil types, soil classification, France 1104
- vegetation, history, charcoal, Switzerland 4760
- weathering, soil chemistry, logging, New Zealand, *Pinus radiata* 1097

Soil fungi
- *Fagus sylvatica,* Netherlands 3590
- keratinophilic fungi, forest trees, Slovakia 1922
- *Libocedrus decurrens,* mycorrhizas, forest fires, erosion, USA 2243
- mycorrhizal fungi, shifting cultivation, India 8436
- mycorrhizas, *Picea abies,* ultrastructure 9082
- *Pseudotsuga menziesii,* mycorrhizas, forest fires, erosion, USA 2243

Soil morphology
- boreal forests, Russia 7906
- crusts, *Chamaecyparis obtusa,* understorey, forest influences, Japan 9762
- *Picea abies,* afforestation, agricultural land, forest influences, Denmark 5351

Soil movement, slopes, landslides 1896

Soil organic matter
- agroforestry, shifting cultivation, carbon cycle, Tropics, reviews 8427
- broadleaved evergreen forests, ecotones, carbon cycle, India 1361
- broadleaves
  - forest litter
    - carbon cycle, France, measurement 5240
    - decomposition, Congo 1912
- cloud forests, soil physical properties, Costa Rica 6276

Soil organic matter *cont.*
- coniferous forests
  - forest litter, decomposition, simulation 6285
  - soil biology, Finland 7939
- deciduous forests, deforestation, carbon cycle, Mexico 4529
- decomposition, *Picea abies,* soil water, fertilizers, Denmark 3581
- deforestation, soil chemistry, Costa Rica 290
- dissolved organic matter, forest trees, Netherlands 1907
- environment, *Pseudotsuga menziesii,* Netherlands 1093
- forest trees, forest litter, USA, nitrogen, mineralization 5254
- lipids, *Pinus pinaster,* forest litter, decomposition, France 1913
- mixing, conifers, Canada, nutrients 6278
- multipurpose trees, afforestation, waste land, carbon cycle, India 7561
- *Picea abies,* forest influences, France 3688
- *Pinus radiata,* artificial regeneration, site preparation, South Africa 181
- *Pinus sylvestris,* seedling growth, acid deposition, field tests, Poland 1958
- podzolic soils, *Pinus radiata,* carbon cycle, silviculture, Australia 4489
- rain forests, Puerto Rico, carbon, isotopes 9693
- reclamation, shelterbelts, Russia 5853
- savannas, ecotones, carbon cycle, India 1361
- soil types, vegetation types, India 7925
- sorption, halogens, Sweden 8777
- vegetation types
  - cycling, soil fertility, sustainability 5269
  - Germany, forest influences 289

Soil parent materials
- conifers, forest decline, geology, France 8943
- *Robinia neomexicana,* soil chemistry, USA, forest influences 3694
- site types, mapping, Germany 9708

Soil pH
- *Acer saccharum,* photosynthesis, plant nutrition, USA 4710
- buffering capacity, Germany, surveys 2813
- Caesalpinioideae, rain forests, Zaire, monkeys 9218
- coniferous forests, air pollution, Finland 3570
- *Eucalyptus regnans,* seed germination, controlled burning, Australia 5365
- forest management, Central Europe 287
- forest trees, Sweden, calcium, aluminium 3572
- forests, synecology, species diversity, Poland 7284
- gradients, conifers, foliage, phenolic compounds, USA 9690
- ground vegetation, soil water, Germany, indicator plants 8167
- mycorrhizas, *Paxillus involutus,* forest trees, nutrition physiology 5583
- *Picea abies,* research, Germany 9697
- soil organic matter, broadleaves, Sweden 2816

Soil physical properties
- *Eucalyptus regnans,* clear felling, Australia, logging effects 5237
- soil parent materials
  - *Arctostaphylos viscida,* roots, USA 4486
  - forest trees, roots, USA 4486

Soil physics
- aggregates, soil biology, microorganisms, forest influences, India 8803
- broadleaves, roots, plant competition, Australia 3059
- forest trees
  - Russia 8772
  - uprooting, USA 8869
- logging, damage, USA 349
- *Pinus radiata,* artificial regeneration, trials, site preparation, South Africa 179

- **Soil physics** *cont.*
  - root zone temperature, broadleaves, seedling growth 6275
  - soil chemistry, *Pinus palustris,* controlled burning, USA, growth effects 5363
  - temperature, site preparation, Sweden 9506
  - tillage, subsoiling, machinery, testing 2809
- **Soil pollution**
  - *Aesculus hippocastanum,* foliage, New Zealand, heavy metals 3675
  - forests
    - fallout, caesium, Spain 5307
    - heavy metals, Germany 5339
    - pesticides, residues, Germany 305
  - fungal diseases, *Gremmeniella abietina, Pinus sylvestris* 9117
  - heavy metals
    - *Betula pendula,* nutrient uptake 7056
    - clear felling, forest influences, Norway 8019
    - compensation, legislation, Germany 7922
    - *Quercus ilex,* forest litter, decomposition, Italy 7908
    - *Quercus mongolica,* forests, Russia 7977
    - spatial variation, *Acer pseudoplatanus,* woodlands, UK 8855
  - manganese, vehicles, *Picea pungens,* dendrochronology, Canada 3680
  - mercury, *Picea mariana,* growth rings, Canada 9737
  - *Picea abies,* growth rings, heavy metals 6457
  - *Pinus sylvestris*
    - radionuclides, fallout, Germany, movement in soil 8830
    - Russia, heavy metals 1920
  - polycyclic aromatic hydrocarbons, forest roads, Germany 1982
  - radionuclides, fallout, Ukraine 5308
  - sediment, heavy metals, mangrove forests, Australia 8828
  - tolerance, *Betula,* reviews 1149
- **Soil pore system,** deforestation, Amazonia 1899
- **Soil properties**
  - *Abies magnifica,* USA 7918
  - allelopathy, site preparation, burning, coniferous forests, USA 9507
  - broadleaves
    - forest influences, Nigeria, land use 8024
    - increment, topography, USA 5235
  - *Callitris columellaris,* forest plantations, understorey, biomass production, India 4334
  - *Castanea sativa,* stand structure, basal area, drainage, Spain 9574
  - conifers
    - clear felling, understorey, Canada 3585
    - climate, Sweden 9683
  - *Dalbergia sissoo,* forest plantations, forest influences, India 1993
  - deciduous forests
    - *Fagus sylvatica,* simulation, Spain 8785
    - history, USA, botanical composition 9916
    - synecology, climate, Venezuela 1370
  - deforestation
    - land clearance, Bolivia 8006
    - land use, plant succession, Costa Rica 2154
  - degraded forests, afforestation, Costa Rica 8390
  - edible fungi, *Tuber magnatum,* Italy 987
  - *Eucalyptus*
    - forest plantations, forest influences, Australia 1185
    - insect pests, defoliation, Australia 7286
  - *Eucalyptus grandis,* pulpwood production, quality, India 283
  - *Eucalyptus regnans,* forest fires, Australia 7137
  - *Faidherbia albida,* canopy, Malawi 8430
- **Soil properties** *cont.*
  - forest fires, India 6379
  - forest plantations, forest influences, reviews 1185
  - forest trees
    - forest litter, nutrients, Denmark 7962
    - soil types, Denmark 1085
  - hydrophobicity, site preparation, burning, coniferous forests, USA 9507
  - mangrove forests
    - plant succession
      - seral stages
        - Bangladesh 284
        - India 284
  - mangroves, stand structure, Nigeria 7293
  - mineralogy, *Pinus sylvestris,* boreal forests, Finland 9685
  - multipurpose trees
    - shelterbelts, species trials, India 3689
    - species trials, agroforestry, soil types, Nigeria 6868
  - *Paraserianthes falcataria,* forest plantations, India, factor analysis 9686
  - *Picea abies*
    - forest plantations
      - forest influences
        - Europe 1185
        - France 1994
    - site class assessment, Russia 5186
  - *Picea glauca,* site class assessment, ground vegetation, plant composition, Canada 8704
  - *Pinus caribaea*
    - ferrallitic soils, Cuba 1086
    - forest plantations, Sri Lanka 5348
  - *Pinus maestrensis,* ferrallitic soils, Cuba 1086
  - *Pinus radiata*
    - forest influences, New Zealand 8021
    - forest plantations
      - forest influences
        - Australia 1185
        - Chile 1185
        - New Zealand 1185
  - *Pinus roxburghii,* nitrogen-phosphorus fertilizers, India 882
  - *Pinus sylvestris,* forest plantations, forest influences, Europe 1185
  - *Pinus taeda,* natural regeneration, forest litter, USA 9912
  - plant parasitic nematodes, *Tylenchulus semipenetrans, Cunninghamia lanceolata,* China 5775
  - plant succession, Russia, simulation 1402
  - pollution, Lithuania, monitoring 8796
  - *Populus interamericana,* agroforestry, nitrogen cycle, Sweden 10115
  - *Prosopis cineraria,* seed germination, planting, India 4336
  - *Quercus cerris,* coppice, silvicultural conversion, Italy 8792
  - rain forests
    - broadleaves, Nigeria 7878
    - Ecuador 3078
    - Guyana, classification 7274
    - synecology, Costa Rica 2154
  - root nodules
    - *Bradyrhizobium, Acacia mangium,* Côte d'Ivoire, growth 9069
    - *Rhizobium, Acacia mangium,* Côte d'Ivoire, growth 9069
  - salvage felling and logging, USA, wetlands 4579
  - *Santalum album,* forest plantations, heartwood, Indonesia 1985
  - savanna woodlands, stand structure, disturbance, Zimbabwe 8156
  - secondary forests, synecology, Costa Rica 2154
  - shelterbelts, erosion control, Canada 8386
  - soil parent materials, vegetation types, botanical composition, Australia 7043
  - soil texture, measurement 1898
  - tropical forests, Sri Lanka 5348
  - variation, mangrove forests, forest influences, Nigeria 8022
  - vegetation types
    - synecology, deserts, Saudi Arabia 8162
    - USA, classification 3057
- **Soil salinity**
  - *Acacia,* defoliation, seasonal variation, wind damage, Cape Verde 1883
  - *Avicennia marina,* natural regeneration, soil chemistry, light, Australia 3883
  - *Casuarina,* vegetation, history, Australia 2126
  - *Populus pruinosa,* foliage, Tajikistan, nutrients 1940
  - *Prosopis,* defoliation, seasonal variation, wind damage, Cape Verde 1883
- **Soil solarization,** forest nurseries, Italy 5118
- **Soil stabilization,** forest roads, plant colonization, USA, grasses 4088
- **Soil structure,** *Pinus,* coniferous forests, plant succession, Russia 285
- **Soil suitability,** agroforestry, mapping, Cuba 9288
- **Soil surveys**
  - classification, Brunei Darussalam 7054
  - matorral, Mexico 301
  - soil chemistry, Germany 9696, 9698
- **Soil temperature**
  - *Acer saccharum*
    - roots, mortality, USA 2030
    - soil chemistry, nitrates, Canada 9694
  - *Calamagrostis canadensis,* weeds, plant competition, plant nutrition 5141
  - *Chamerion angustifolium,* weeds, plant competition, plant nutrition 5141
  - cloud forests, soil organic matter, Costa Rica 6276
  - deciduous forests, simulation 1090
  - forest influences, Japan, urban areas 357
  - *Pinus,* clear felling, USA 5349
  - sclerophyllous scrub, forest fires, seed germination, Australia 8036
  - site preparation, Finland 7779
- **Soil texture**
  - fine fraction, *Quercus,* biomass production, USA 1091
  - *Fraxinus pennsylvanica,* roots, planting, growth 2056
  - *Larix decidua,* site class assessment, USA, methodology 1842
- **Soil toxicity**
  - acidification, *Eucalyptus,* forest influences, Australia 5354
  - afforestation, mine spoil, Ukraine 10091
  - aluminium
    - broadleaves, shoot cuttings, growth 9710
    - *Eucalyptus,* forest influences, Australia 5354
    - forest trees, seedlings, growth 9709
    - *Picea abies,* plant nutrition, seedlings 7969
    - *Pinus sylvestris,* plant nutrition 6310
  - boron, tolerance, forest trees 7921
  - cadmium, *Betula pendula,* plant nutrition, seedling growth 4501
  - forest treees, salt spray, Denmark 8000
  - *Picea abies,* seedlings, plant nutrition, aluminium, calcium 1125
  - soil pH, aluminium, *Picea abies,* seedlings, roots 7920
- **Soil treatment,** *Terminalia brownii,* forest plantations, water stress, Kenya 3611
- **Soil types**
  - acid soils
    - forests, soil analysis, cations, rhizosphere 5236
    - multipurpose trees
      - lime, agroforestry, Indonesia 4113
      - species trials, agroforestry, Cameroon 2542
    - *Picea abies*
      - fertilizers, lime, mycorrhizas, *Cenococcum geophilum,* Finland 3162
      - nutrient deficiencies, magnesium, fertilizers, lime, France 2856
    - tolerance, *Acacia,* species trials, methodology 7718
  - *Alnus glutinosa,* vegetation types, Russia 300
  - arid soils, root nodules, *Rhizobium,* nitrogen fixing trees, India 2234
  - basalt soils, reclamation, farm forestry, agroforestry, Australia, wetlands 8410

Soil types *cont.*
- broadleaves, vegetation, surveys, Italy 303
- clay soils
  - amenity trees
    - buildings
      - databases, UK 10146
      - foundations, UK 10145
- conifers, forest plantations, fertilizers, Russia 5108
- *Cryptomeria japonica,* vegetation, surveys, Japan 7279
- duplex soils, *Pinus,* forest plantations, phosphorus fertilizers, South Africa 126
- edible fungi, radionuclides, uptake, Russia 7980
- eroded soils
  - *Pinus roxburghii,* nitrogen-phosphorus fertilizers, mulching, India 130
  - reclamation, site class assessment, choice of species, India 6705
- *Eucalyptus,* site class assessment, increment, volume, Uruguay 1003
- *Eucalyptus tereticornis,* forest plantations, soil amendments, India 883
- ferrallitic soils
  - *Pinus caribaea,* soil properties, Cuba 1086
  - *Pinus maestrensis,* soil properties, Cuba 1086
- fish pond soils, toxicity, urban forestry, mortality, Hong Kong 10144
- forest soils
  - acid deposition, Korea Republic, simulation 8849
  - mine spoil, *Eucalyptus calophylla,* seed collection, Australia 6466
  - plant parasitic nematodes, surveys, South Africa 669
  - soil acidity, humus, Norway 9692
  - soil biology, microorganisms, biomass, Japan 7932
- forest trees, soil properties, Denmark 1085
- *Juniperus pinchotii,* forest influences, ground vegetation, USA 6556
- lateritic soils
  - *Acacia auriculiformis,* reclamation, mine spoil, India 10092
  - forest plantations, forest influences, soil chemistry, India 8023
- latosols
  - *Gmelina arborea*
    - seedling growth, wood density, nitrogen-phosphorus fertilizers 134
    - seedlings, wood properties, nitrogen-phosphorus fertilizers 135
- leptosols, remote sensing, image interpretation, stand characteristics, Sweden 5205
- mapping, Australia 8743
- mollisols, ultisols, forests, India 7052
- mountain forests
  - forest management
    - Czech Republic, monographs 45
    - Slovakia, monographs 45
  - Germany 9707
- multipurpose trees
  - planting, rangelands, Tunisia 8420
  - species trials, agroforestry, soil properties, Nigeria 6868
- mycorrhizas, inoculum, Costa Rica, bioassays 5271
- oxisols, *Sesbania sesban,* root nodules, surveys, Zaire 2240
- peat soils, gases, Sweden, *Pinus sylvestris* 2808
- permafrost
  - *Picea mariana,* oil spills, damage, USA 5342
  - thawing, boreal forests, USA 7880
- *Pinus,* site class assessment, increment, volume, Uruguay 1003
- *Pinus pinaster,* forest decline, frost injury, France 3567
- *Pinus radiata,* NPK fertilizers, nutrient deficiencies, South Africa 7073

Soil types *cont.*
- *Pinus sylvestris,* roots, distribution, statistical analysis, Kazakhstan 6408
- pseudogleys, *Quercus,* forest plantations, increment, Slovenia 2695
- rain forests, Melastomataceae, botanical composition, Peru 3940
- root nodules, *Frankia, Casuarina cunninghamiana,* seedling growth, phosphorus fertilizers 6904
- saline soils
  - *Atriplex semibaccata,* reclamation, mined land, South Africa 8391
  - choice of species, afforestation, Russia 2544
  - *Eucalyptus globulus,* forest plantations, reclamation, Australia 9246
  - forest trees, reclamation, species trials, Australia 7715
  - multipurpose trees, species trials, reclamation, Pakistan 6014
  - *Prosopis juliflora,* reclamation, agroforestry, India 8389
  - reclamation
    - afforestation, India, techniques 8387
    - farm forestry, development projects, Australia 7566
  - *Tamarix,* shoot cuttings, shelterbelts, Mexico 7556
- *Salix viminalis,* genetic variation, genotype environment interaction, increment, plant nutrition 4838
- sandy loam soils
  - *Eucalyptus tereticornis,* forest litter, decomposition, laboratory tests 5264
  - *Populus deltoides,* forest litter, decomposition, laboratory tests 5264
- sandy soils
  - *Ailanthus excelsa,* forest plantations, nitrogen-phosphorus fertilizers, India 131
  - plant succession, cycling, Germany 7961
- shale soils, *Pinus,* forest plantations, phosphorus fertilizers, South Africa 126
- silt loam soils, root nodules, *Frankia, Casuarina,* New Zealand 3160
- sodic soils
  - classification, distribution, India 302
  - multipurpose trees, species trials, reclamation, India 712
  - *Pongamia pinnata,* planting season, India 6115
  - reclamation, waste land, research, India 8392
  - *Terminalia arjuna,* planting season, India 6115
- soil formation, soil classification, France 1104
- soil organic matter, vegetation types, India 7925
- steppe soils, shelterbelts, reclamation, Russia 5854
- stony soils, reclamation, farm forestry, agroforestry, Australia, wetlands 8410
- ultisols
  - multipurpose trees, fertilizers, seed size, pot experimentation 7758
  - soil formation, soil suitability, afforestation, China 8786
- vegetation, geology, geomorphology, erosion, Spain 7859
- vegetation types, altitude, Japan, mountain forests 9925
- volcanic soils
  - forest trees, humus, formation, Japan 5261
  - *Metrosideros polymorpha,* plant succession, nitrogen fixation, USA 2827
  - *Pseudotsuga menziesii,* nutrient deficiencies, USA 7053

Soil water (*see also* Groundwater)
- *Acacia,* phenology, climate, site factors, Australia 3707

Soil water *cont.*
- availability, *Eucalyptus grandis,* growth models, water use efficiency, South Africa 9355
- broadleaves
  - agroforestry, microclimate, Canada 9278
  - light, increment, USA 5181
- *Casuarina equisetifolia,* nitrogen fixation, India 3154
- *Chamaecyparis obtusa,* evapotranspiration, Japan 3600
- chemistry
  - forest trees, forest decline, salt injury, Denmark 1295
  - *Picea abies,* clear felling, whole tree logging, Sweden 3569
  - *Pinus sylvestris,* Finland 7879
- deciduous forests
  - canopy gaps, Japan 4485
  - dendrochronology, climate, Canada 4142
- deforestation, water quality, streams, Brazil, simulation 8419
- equations, climatic zones, India 1088
- *Eucalyptus globulus,* roots, irrigation, fertilizers, Portugal 8767
- *Eucalyptus grandis,* increment, South Africa, simulation 7680
- *Fagus sylvatica,* natural regeneration, seedbeds, light, Denmark 6920
- forest plantations, precipitation, South Africa, simulation 9354
- forest trees, uprooting, USA 8869
- forests, aspect, China 8770
- freezing, *Acer saccharum,* snow, forest decline, Canada 2811
- ground vegetation
  - control, water stress, growth 6907
  - soil pH, Germany, indicator plants 8167
- increment, simulation 7680
- infiltration
  - multipurpose trees, reclamation, waste land, India 8397
  - *Pinus muricata,* controlled burning, USA 6382
- measurement, time domain reflectometry, forest trees, USA 9688
- *Picea abies,* soil organic matter, decomposition, fertilizers, Denmark 3581
- *Pinus banksiana,* natural regeneration, seedbeds, light, laboratory tests 9964
- *Pinus resinosa,* gas exchange, methane, USA 4503
- *Pinus sylvestris,* direct sowing, seedling emergence, site preparation, Sweden 6111
- *Populus,* forest fires, fire danger, fuels, Canada 8030
- *Pseudotsuga menziesii*
  - ozone, translocation, carbon 1142
  - plant water relations, Netherlands, simulation 3568
- *Quercus*
  - forest decline, drought, Spain 8120
  - plant water relations
    - France 7952
    - simulation 7951
  - root systems, plant water relations, France 5280
- *Quercus ilex,* Spain, chemistry 5249
- *Quercus petraea,* thinning, France, effects 7066
- *Quercus robur*
  - seedlings, biomass distribution 7155
  - water stress, leaf water potential, France 1935
- repellency, *Pinus patula,* Colombia 1900
- *Salix,* short rotation forestry, weed control, Canada 917
- thinning
  - Argentina 177
  - water stress, growth 6907
- water deficit, *Quercus robur,* transpiration, Russia, meteorological factors 7064

Soil water balance
- boreal forests, evapotranspiration, Canada 7949

- **Soil water balance** *cont.*
  - *Fagus sylvatica*, canopy gaps, cycling, Germany 7950
  - rain forests, forest influences, Brazil 8871
- **Soil water content**
  - cloud forests, soil organic matter, Costa Rica 6276
  - *Pseudotsuga menziesii*, roots, plant physiology, growth 1725
- **Soil water movement**
  - forest litter, measurement, techniques 7881
  - slopes, hydrology, Japan 8769
- **Soil water potential**
  - *Liquidambar styraciflua*, plant competition, USA 166
  - *Picea abies*, diameter, Germany 9687
- **Soil water regimes**
  - *Abies balsamea*, increment, thinning, USA 1774
  - clear felling, site preparation, altitude, Canada 3447
  - *Eucalyptus viminalis*, seedling growth, water uptake, pot experimentation 3595
  - *Picea abies*, mycorrhizas, nitrogen fertilizers, Sweden 8260
  - *Taxodium distichum*, increment, USA, road construction 7063
  - *Vouacapoua americana*, recruitment, seed dispersal, French Guiana 6571
  - wetlands, biomass production, USA 6963
- **Soil water retention,** *Populus tremula*, afforestation, soil conservation, China 5841
- ***Solanum aviculare*,** plant development 2966
- ***Solanum crinitum*,** plant water relations, canopy gaps, plant succession, Brazil 6576
- **Solar radiation**
  - albedo, deciduous forests, clear felling, Canada 8009
  - canopy, measurement 26
  - light, measurement 8497
  - *Picea rubens*, frost injury, aspect, USA 8763
  - *Quercus*, canopy, USA, defoliation 3725
  - ultraviolet radiation
    - forest trees, plant physiology, Panama 6257
    - *Pinus*, photosynthesis, water stress, Greece 7027
- ***Solenospermum javanicum*,** wood anatomy 414
- ***Solheimia costaspora*,** endophytes, *Inga goldmanii*, branches, Costa Rica 9067
- **Solomon Islands,** nature conservation, development projects 9299
- **Somalia,** flora, checklists, books 758
- ***Sonneratia*,** mangroves, geographical distribution, coastal areas, India 2120
- ***Sonneratia alba***
  - mangrove forests, remote sensing, synecology, India 6996
  - mangroves
    - foliage, Kenya, chemistry 4676
    - salt tolerance, Australia 6553
- ***Sonneratia apetala***
  - afforestation, erosion control, India 3225
  - forest plantations, sustainability, underplanting, mangroves, Bangladesh 6108
  - mangrove forests
    - increment, diameter, natural regeneration, Bangladesh 6177
    - remote sensing, synecology, India 6996
- ***Sonneratia caseolaris*,** fisheries, Sri Lanka 9232
- ***Sonneratia lanceolata*,** mangroves, salt tolerance, Australia 6553
- ***Sophora*,** wood anatomy, phylogeny, keys 8906
- ***Sophora japonica***
  - embryo culture 838
  - fungal diseases, *Uromyces truncicola*, Japan 2277, 5706
  - insect pests
    - *Bruchophagus sophorae*, seeds, Slovakia, damage 838
- ***Sophora japonica*** *cont.*
  - insect pests *cont.*
    - Lepidoptera, Japan 5706
  - reproductive behaviour 2111
  - reviews, bark, chemistry, lectins 1248
  - seed germination 838
- ***Sophora secundiflora*,** roots, chemistry, chemotaxonomy, flavonoids 9841
- ***Sophora tetraptera*,** roots, chemistry, flavonoids 9832
- ***Sophora toromiro*,** tissue culture, endangered species, Easter Island 1700
- ***Sorbaria tomentosa*,** biomass production, India, equations 789
- ***Sorbus*,** silvicultural characters, France 957
- ***Sorbus alnifolia*,** bacterial diseases, *Erwinia amylovora*, USA 9122
- ***Sorbus aria***
  - artificial regeneration, protection forests, Germany 7552
  - choice of species, protection forests, avalanches, Germany 6869
  - hybrids, population genetics, plant morphology, Switzerland 6596
- ***Sorbus aucuparia***
  - air pollution, fluorides, foliage, damage, Norway 5330
  - choice of species, protection forests, avalanches, Germany 6869
  - foliage, optical properties, remote sensing 1256
  - fruits, edible species, cooking, palatability 1810
  - genetic transformation 7379
  - mixed forests, natural regeneration, synecology, Poland 8179
  - plant nutrition 2850
  - reclamation, mine spoil, UK, soil amendments 6708
  - rodents, damage, provenance trials, Sweden 4055
  - taxonomy, plant morphology, habit, Poland 2114
  - viral diseases, Germany 8318
  - wildlife
    - *Alces alces*, browse, forests, Poland 7534
    - weed control, woody weeds, Norway 10070
- ***Sorbus domestica*,** agroforestry, Corsica 5883
- ***Sorbus folgneri*,** bacterial diseases, *Erwinia amylovora*, USA 9122
- ***Sorbus intermedia*,** embryology 7167
- ***Sorbus latifolia*,** hybrids, population genetics, plant morphology, Switzerland 6596
- ***Sorbus torminalis***
  - agroforestry, France 5882
  - forest decline, France 3817
  - hybrids, population genetics, plant morphology, Switzerland 6596
  - silvicultural characters
    - France 957
    - Switzerland 3466
- **South Africa**
  - *Acacia*
    - browsing damage, foliage, plant morphology 5808
    - savannas, seed predation, rodents 4068
    - woody weeds
      - control 169
      - cycling 6319
      - seedling growth, soil fertility 2646
  - *Acacia erubescens*
    - canopy
      - woodland grasslands
        - ground vegetation 359
        - soil fertility 359
  - *Acacia longifolia*, woody weeds, control 8646
  - *Acacia mearnsii*, site class assessment, soil depth, statistical analysis 1002
  - afforestation, forest management, planning, permits, environmental protection 6989
  - agroforestry, forest products industries, production possibilities 724
- **South Africa** *cont.*
  - *Apodytes*, taxonomy, new species, botany 3849
  - *Archaeopteris notosaria*, palaeobotany, palaeoclimatology 8148
  - *Atriplex semibaccata*, reclamation, saline soils, mined land 8391
  - *Avicennia marina*, mangrove forests, algae, epiphytes 7301
  - birds, ecology, forest plantations, riparian forests 3210
  - broadleaved evergreen forests
    - forest fires, wind 2134
    - increment, crown, stem form 224
    - plant competition, increment, synecology 223
    - secondary forests, synecology, stand characteristics 516
  - climbers, synecology, habit, forest trees 3946
  - *Combretum apiculatum*
    - canopy
      - woodland grasslands
        - ground vegetation 359
        - soil fertility 359
  - computer techniques, organizations 7686
  - controlled burning, watershed management, fynbos, mountain areas 1193
  - crabs, *Sesarma meinerti*, mangroves, forest litter, degradation 1523
  - ergonomics, research 4249
  - *Eucalyptus*
    - breeding programmes
      - pulpwood production, intensive silviculture 553
      - vegetative propagation, pulpwood production 552
    - forest nurseries, fertilizers, seaweed products 9476
    - forest plantations
      - mortality, increment, drought 7873
      - weed control, increment, simulation 7786
    - silviculture, forest management, sustainability 7794
    - species trials
      - frost resistance 7722
      - pulpwood production 2552
  - *Eucalyptus camaldulensis*, urban forestry, beekeeping 6951
  - *Eucalyptus grandis*
    - growth models, soil water, water use efficiency 9355
    - molecular genetics, clones, identification 576
    - site class assessment, equations, increment, height 7824
    - soil water, increment, simulation 7680
    - tree breeding, wood properties, growth effects 575
  - *Eucalyptus sideroxylon*, urban forestry, beekeeping 6951
  - Fabaceae, woody weeds, biological control 8640
  - forest inventories 240
  - forest plantations, soil water, precipitation, simulation 9354
  - forest trees
    - height, estimation, forest inventories, equations 212
    - sap, groundwater, isotopes, oxygen 2832
    - tree breeding 8190
  - forestry
    - nature conservation, sustainability 7594
    - sociology, land reform, rural development 48
  - forests
    - coastal areas, reclamation, monkeys, seed dispersal 3211
    - foliage, morphology, chemistry 8897
  - fuelwood
    - resources
      - deforestation 8556
      - forest management, land use 4253
  - fungal diseases
    - *Botryodiplodia theobromae*, conifers, seeds 603

South Africa *cont.*
- fungal diseases *cont.*
  - *Diplodia pinea, Pinus radiata,* hail damage, insect pests 7038
  - *Phytophthora*
    - *Eucalyptus* 8291
      - reviews 1452
    - *Pinus* 8291
      - reviews 1452
  - *Pythium*
    - *Eucalyptus* 8291
      - reviews 1452
    - *Pinus* 8291
      - reviews 1452
  - *Pythium irregulare, Pinus patula,* seedlings 5622
  - *Pythium splendens, Eucalyptus grandis,* pathogenicity 5632
- fynbos
  - biodiversity, genetic resources 530-531
  - nature conservation, biodiversity 528
  - resource management, controlled burning, biodiversity 529
- *Grevillea robusta,* urban forestry, beekeeping 6951
- insect pests
  - *Nematus oligospilus, Salix,* biology, damage 9175
  - *Tanaostigmodes tambotis*
    - *Spirostachys africana*
      - biology 7492
      - new species 7492
- *Jacaranda mimosifolia,* urban forestry, beekeeping 6951
- land classification 7876
- *Leucadendron rubrum,* plant growth regulators, cytokinins, sex, phenology 3778
- mammals, leopards, *Acacia* 3206
- medicinal plants, ethnobotany 981
- natural regeneration, shade, tolerance, foliage, nitrogen 5468
- nectar plants, beekeeping, forestry 6150
- *Paraserianthes lophantha,* woody weeds, control 8646
- *Pinus*
  - afforestation, agricultural land, stand establishment, mortality 7778
  - breeding programmes
    - pulpwood production, intensive silviculture 553
    - vegetative propagation, pulpwood production 552
  - forest litter, measurement, decomposition, fungi 294
  - forest plantations, phosphorus fertilizers, soil types 126
  - increment, distribution, simulation 4384
- *Pinus elliottii,* phosphorus fertilizers, forest litter 9466
- *Pinus maximinoi,* provenance trials, pulpwood production 60
- *Pinus patula*
  - afforestation, agricultural land, allelopathy, nutrient deficiencies 154
  - forest plantations, mycorrhizas, fertilizers 4846
  - progeny testing, wood properties 1425
  - provenance trials, stems, stem form, breakage 61
  - tissue culture, micropropagation 4277
  - wood properties, provenance 4633
- *Pinus pinaster,* clear felling, burning, soil chemistry 4613
- *Pinus radiata*
  - artificial regeneration
    - planting stock
      - grading, morphology 182
      - mortality 183
    - site preparation
      - soil chemistry, plant nutrition 180
      - soil organic matter 181
    - trials, site preparation, soil physics 179
  - NPK fertilizers, nutrient deficiencies, soil types 7073

South Africa *cont.*
- *Pinus radiata cont.*
  - site preparation, weed control, botanical composition 9505
  - volume, assortments, yield forecasting, equations 216
- *Pinus taeda,* provenance trials 2553
- plant parasitic nematodes, surveys, forest soils 669
- *Podocarpus,* reproductive behaviour, fruits 3836
- pollen, allergens, air pollution 9409
- *Populus deltoides,* agroforestry 723
- Proteaceae, reproductive behaviour, fynbos 1305
- *Protorhus namaquensis,* taxonomy, seed anatomy 3848
- research, organizations 7708
- research institutes, reports 2456
- rodents, pests, *Pinus patula,* forest plantations, control 1516
- savannas, stand structure, damage 4804
- sclerophyllous scrub, botanical composition, site factors 3077
- urban forestry
  - beekeeping 6951
  - environment, landscape 739
- vegetation types
  - savannas, synecology, books 4997
  - synecology 8160
- *Virgilia oroboides,* genetic variation 7378
- *Vitex,* taxonomy, new taxa 502
- *Widdringtonia cedarbergensis,* nature conservation 4973
- woody plants, choice of species, fynbos, expert systems 9359
- woody weeds, invasion, fynbos, expert systems 9359
- KwaZulu, vegetation types, synecology 5451

South America
- *Brachynema axillare,* taxonomy 9902
- forest trees
  - choice of species, forestry development, handbooks 2551
  - medicinal plants 200
- Myrtaceae, wood anatomy 6415
- *Ouratea scottii,* taxonomy 4741
- tropical forests, palaeoecology, pollen analysis 3067
- *Zygia,* taxonomy, new species 8967

South Asia, agroforestry, profiles, development projects 3263

South East Asia
- *Acacia auriculiformis,* provenance trials, data processing, statistical analysis 29
- agroforestry
  - education, international cooperation 9267
  - profiles, development projects 3263
- America, agroforestry, livestock farming, conferences 4181
- deforestation, land use, sustainability, water resources 707
- *Excoecaria,* taxonomy, flora 7240
- forest resources, land use, natural regeneration 5034
- forestry
  - environment, development 5984
  - forest ecology, vegetation types, books, conferences 5922
- *Jasminum*
  - flora, checklists 7249
  - taxonomy 7232
- provenance trials, *Acacia auriculiformis* 6867
- rain forests, deforestation, environment 5864
- reclamation, degraded forests, techniques, reviews 3238
- swamps, fishes, species diversity, conservation 10080
- timbers, books 756
- Tropics, agroforestry, livestock farming, conferences 4181

Southern Africa
- insects, *Ceratosolen galili, Ficus sycomorus,* ecology 620
- *Ozoroa paniculosa,* autecology 3719

Southern Africa *cont.*
- savanna woodlands, forest management, socioeconomics, research 8527
- woody plants, species diversity, climate 2150

Spacing
- *Albizia procera,* shade trees, crops, Cuba 1557
- *Alnus rubra,* reproductive behaviour, irrigation, fertilizers, USA 9869
- *Betula pendula*
  - increment, Finland 9532
  - wood properties, Finland 9531
- conifers, crown, Canada, growth 4331
- *Cryptomeria japonica,* genetic variation, wood properties, clones 9758
- *Eucalyptus tereticornis,* biomass production, increment, energy relations, India 2657
- *Gliricidia sepium,* weed control, community forestry, Malawi 1786
- growth effects, *Picea sitchensis,* wood properties, UK 2655
- *Larix decidua,* stand development, Germany 8660
- *Leucaena leucocephala*
  - *Diospyros celebica,* mixtures, Indonesia 1788
  - shade trees, crops, Cuba 1557
  - *Swietenia macrophylla,* mixtures, Indonesia 1788
- mangroves, *Rhizophora apiculata,* increment, Indonesia 1776
- multipurpose trees, biomass production, India 1779
- *Nauclea diderrichii,* increment, stem form, Cameroon 3458
- *Picea,* increment, Canada, juvenile wood 2899
- *Picea abies*
  - forest plantations, Russia 1778
  - increment, Sweden 3457
  - wood density, Sweden 9757
- *Picea mariana*
  - increment, NPK fertilizers, Canada 1714
  - plant nutrition, NPK fertilizers, Canada 1714
  - wood properties, increment, Canada 1182
- *Picea sitchensis,* air flow, canopy, UK 8014
- *Pinus contorta,* provenance trials, Canada 9419
- *Pinus kesiya,* thinning, increment, Zimbabwe 6942
- *Pinus maestrensis,* stand development, increment, Cuba 950
- *Pinus pinaster*
  - agroforestry, nitrogen-phosphorus fertilizers, Greece 8428
  - forest plantations, France, growth, wood properties 6924
- *Pinus resinosa,* crown, development, increment, Canada 1225-1226
- *Pinus sylvestris*
  - afforestation, tree breeding, Sweden 9974
  - increment, stem form, Finland 6937
- *Pinus taeda*
  - plant competition, USA, growth 1780
  - USA, wood properties 4587
- *Populus,* short rotation forestry, stand density, methodology, estimation 2207
- *Populus deltoides*
  - agroforestry, Pakistan 6724
  - cycling, biomass production, India 1941
- *Populus* 'G-3', roots, distribution, India 2658
- *Pseudotsuga menziesii*
  - seed orchards, USA 4265
  - stand density, Italy, volume, biomass 9587
- *Tilia,* beekeeping, USA 6950
- trees, savannas, Venezuela 517
- *Tsuga heterophylla,* USA, branches, diameter 4350

Spain
- *Abies pinsapo*
  - pollen, viability, dispersal, reproductive behaviour 489
  - stand characteristics, canopy gaps, forest ecology 9024
- afforestation
  - amenity and recreation areas, valuation 8448
  - hydrology, erosion 9238
- agroforestry, land use, sustainability 1561
- *Alnus glutinosa*
  - rhizosphere, soil bacteria, seasonal variation, nitrogen cycle 1923
  - riparian forests, classification 4772
- *Arbutus unedo*
  - coppice, plant competition, biomass 3865
  - light, plant physiology, plant competition 8753
  - water stress, growth 1937
- birds
  - ecology
    - mountain forests 8371
    - scrub 8371
  - insecticides, malathion, effects 9197
  - *Lanius,* woody plants, ecology 8373
  - Passeriformes, forests, fragmentation 4063
  - *Phillyrea latifolia,* seed dispersal 477
  - *Turdus, Juniperus thurifera,* seed dispersal 2387
- broadleaves
  - biomass production, plant water relations, gas exchange, plant nutrition 3793
  - epiphytes, synecology 1388
  - planting, irrigation, saline water 160
- *Castanea sativa,* stand structure, basal area, drainage, soil properties 9574
- *Cistus ladanifer,* scrub, synecology, species diversity 9922
- *Corylus avellana,* forest plantations, truffles, production, economics 1807
- *Cupressus sempervirens,* variety trials, site factors, plant morphology 6020
- deciduous forests, *Fagus sylvatica,* soil properties, simulation 8785
- dehesa grasslands, woodlands, deer farming 8355
- edible fungi
  - *Morchella*
    - *Abies alba,* ecology 2677
    - *Pinus,* ecology 2677
- essential oils, *Eucalyptus globulus* 6437
- *Eucalyptus,* forest plantations, public opinion 5979
- *Fagus sylvatica*
  - climax communities, forest litter, decomposition 7915
  - dendrochronology, autecology 1592
  - forests, synecology, statistical analysis 2142
  - natural regeneration, mortality, advance growth, drought 927
- fertilizers, sewage sludge, legislation 8593
- flora, species diversity, conservation 8138
- forest fires
  - Bryophyta, plant succession 1195
  - natural regeneration, indicator species, small mammals 2393
  - simulation 8034
- forest inventories
  - damage, defoliation, drought, forest fires 7816
  - remote sensing, multispectral imagery 6228
- forest management, forestry, legislation 1636
- forest plantations
  - establishment, mortality, seasonal variation 1746
  - height, increment, climate 1826
- forest trees
  - allelopathy, plant composition, forest litter 7315
  - carbon cycle, simulation 2849
  - forest litter
    - decomposition 9699

Spain *cont.*
- forest trees *cont.*
  - forest litter *cont.*
    - decomposition *cont.*
      - phytotoxicity 7313
  - volume, increment, bark, equations 5961
  - water stress, plant physiology 1114
- forestry, public sector 809
- forests
  - fallout, caesium, soil pollution 5307
  - forest plantations, multiple land use, species diversity 8407
- fungal diseases
  - *Microsphaera vanbruntiana, Sambucus racemosa* 5660
  - *Seiridium cardinale, Cupressus sempervirens,* resistance 6020
- goats, *Capra pyrenaica,* browse 10058
- heathlands, biodiversity 7298
- insect pests
  - *Altica quercetorum, Quercus* 5760
  - *Cedestis subfasciella, Pinus,* biology, damage 8332
  - *Clavigesta sylvestrana, Pinus,* biology, damage 8332
  - *Exoteleia dodecella, Pinus,* biology, damage 8332
  - *Magdalis, Pinus nigra,* biology, damage 9147
  - *Ocnerostoma piniariellum, Pinus,* biology, damage 8332
  - *Psylliodes ruficolor, Quercus ilex,* new species 659
  - *Tortrix viridana, Quercus pyrenaica,* control, nontarget effects 9197
- land use, landscape ecology, fragmentation, forest plantations 3871
- logging, biomass, forest ecology 2893
- mammals, *Apodemus sylvaticus, Juniperus thurifera,* seed dispersal 2387
- maquis, synecology 3908
- mycorrhizas
  - *Descolea maculata, Eucalyptus globulus* 8277
  - *Pinus halepensis*
    - fertilizers, refuse 4002
    - seedling growth 4844
- national parks, land use, remote sensing, Landsat 6751
- *Phillyrea angustifolia,* reproductive behaviour, sex, insect pests, *Schizomyia phillyreae* 4735
- *Pinus*
  - dendrochronology 6766
    - autecology 1592
    - ecology, history 2441
  - seed germination, forest fires 5364
  - soil amendments, slash, wood chips, soil chemistry 6071
  - soil biology, microorganisms, controlled burning 8883
- *Pinus halepensis*
  - forest fires, remote sensing 3696
  - humus, soil biology 1102
- *Pinus nigra,* population genetics 5487
- *Pinus pinaster*
  - chemotaxonomy, extractives 3047
  - chloroplasts, ultrastructure, air pollution 3727
  - foliage, chemical composition, utilization 6456
  - forest fires, fire effects, soil chemistry 8035
  - mixed forests, forest management, soil fertility 1190
  - stem form, taper, volume determination 788
- *Pinus radiata*
  - clear felling, forest litter, cycling 5251
  - forest decline, air pollution, vehicles 1166
  - forest influences, acid deposition 3671
  - forest litter, leaching 7911

Spain *cont.*
- *Pinus sylvestris*
  - forest litter
    - foliage
      - measurement
        - biomass production 7902
        - climate 7902
  - forest plantations, forest litter, decomposition 7915
  - ground vegetation, synecology, species diversity 3942
  - mountain forests 2133
  - natural regeneration, light 926
  - palaeoecology 8991
  - population genetics, isoenzymes 2185
  - provenance trials 7719
  - sapwood, foliage, plant water relations, climate 5284
  - soil chemistry, nitrogen, aspect 7889
  - species diversity, environmental factors 5449
  - watersheds, hydrology, cycling, cations 8377
- pollen, atmosphere, urban areas, botanical composition, variation 3069
- pollen analysis, vegetation, history, palaeoecology 2133
- *Populus canadensis,* veneers, quality, variation, growth effects 6365
- *Prunus mahaleb,* seed dispersal, birds, ecology, species diversity 9204
- *Quercus*
  - coppice, resources, management 8613
  - deciduous forests, synecology, climate 3903
  - dehesa grasslands, water balance 4077
  - foliage, trichomes 6403
  - forest decline 9861
    - drought, soil water 8120
  - forest litter, decomposition 7909
  - forest plantations, truffles, production, economics 1807
  - forests, Formicidae 9130
- *Quercus faginea* 2925
  - forests, synecology 8158
- *Quercus ilex*
  - abandoned land, stand characteristics, botanical composition, mapping 7849
  - canopy, stand structure, plant water relations 2840
  - dehesa grasslands, rangelands, botanical composition 9924
  - fertilizers, irrigation, interactions 3415
  - foliage, fertilizers, irrigation, plant composition 3752
  - nutrient content, variation 7957
  - soil biology, Collembola 1921
  - soil water, chemistry 5249
  - thinning, increment 2653
  - water quality, acid deposition, sulfur, logging 7548
  - water stress, drought, watersheds 1122
- *Quercus pyrenaica*
  - bioclimate 1876
  - biomass production, forest litter, stand density, climate 1824
  - canopy, leaf water potential, transpiration 1933
  - dehesa grasslands
    - ground vegetation 1384
    - synecology, agroforestry 8433
  - forest litter, decomposition, nutrients 6291
- *Quercus robur,* micropropagation, shoot cuttings 3395
- *Quercus rotundifolia,* taxonomy, fruits, morphology 1321
- *Quercus suber*
  - biomass, cork, forest litter, increment 1825
  - cork, yields, quality 7800
  - mixed forests, forest management, soil fertility 1190
  - natural regeneration, artificial regeneration, reviews 7775
- remote sensing
  - multispectral imagery, land use 1863

Spain *cont.*
  remote sensing *cont.*
    thematic mapper, image processing, forest fires 7847
  Rhamnus frangula, reproductive behaviour 4728
  rodents, *Apodemus flavicollis, Fagus sylvatica* 10060
  scrub 3928
  shrubs
    sclerophyllous scrub, habit 3705
    shoots, fire ecology, plant physiology 9775
  understorey, energy value, seasonal variation, forest fires, fire danger 9773
  vegetation
    ecology, management, conferences 776
    soil types, geology, geomorphology, erosion 7859
  vegetation types
    coastal plant communities 9007
    forests, climatic change 9668
  wildlife
    birds, *Quercus pyrenaica,* feeding behaviour 8368
    Sus scrofa, vegetation types, habitats 7516
  woody plants, forest litter, decomposition, vegetation types 2821
Spathodea campanulata, phenology, flowering, fruiting, Venezuela 5368
Species diversity
  broadleaves, clear felling, natural regeneration, USA 3121
  canes and rattans
    Calamus, reproductive behaviour, Sabah 2013
    Korthalsia furtadoana, reproductive behaviour, Sabah 2013
  Celaenodendron mexicanum, tropical forests, Mexico 2146
  forest ecology, plant succession, land use, USA 5461
  forest plantations, vegetation, surveys, Italy 1744
  Pinus sylvestris, environmental factors, Spain 5449
  Quercus, mountain forests, plant succession, Costa Rica 5460
  rain forests, Colombia 5446
  riparian forests, birds, France 9206
  tropical forests, environmental factors 5447
  woody plants
    climate, Southern Africa 2150
    vegetation types, Temperate Zones 2149
Species trials
  Acacia
    acid soils, tolerance, methodology 7718
    Cape Verde 1667
    coppicing, Malawi 1670
    provenance trials, seed germination, India 8564
    reclamation, mined land, Peninsular Malaysia 3240
    Sri Lanka 5054
  Acacia mangium, reclamation, mined land, agroforestry, Peninsular Malaysia 3241
  Acacia sieberiana, India 832
  amenity trees, USA 68
  Azadirachta indica, Sri Lanka 5054
  bauxite residues, reclamation, Australia 67
  Betula, air pollution, tolerance, Poland 1150
  broadleaves
    China 5941
    genetic resources, Arid Regions, conservation 1436
    mangrove forests, Bangladesh 6017
    reclamation
      landfills
        plant nutrition, UK 4948
        UK 4947
      mined land, Venezuela 6711

Species trials *cont.*
  broadleaves *cont.*
    salt tolerance
      Australia
        growth 5052
        survival 5052
  Calliandra calothyrsus
    biomass production, increment, Western Samoa 1668
    Indonesia 1653
  Costa Rica, broadleaves 4262
  degraded forests, reclamation, plant succession, India 6704
  Eucalyptus
    chemotaxonomy, essential oils, Australia 5399
    frost resistance
      Lesotho 2547
      South Africa 7722
    increment, Australia 3477, 6190
    provenance trials, Argentina 835
    pulpwood production, South Africa 2552
    Sri Lanka 5054-5055
  Eucalyptus tereticornis, hybrids, India 8565
  Fabaceae, direct sowing, agroforestry, Jamaica 2420
  forest plantations, grazing, France 5884
  forest trees
    exotics, arboreta, New Zealand 2545
    firebreaks, Indonesia 2000
    reclamation, saline soils, Australia 7715
    rehabilitation, Canary Islands 6032
  fuel plantations, irrigated stands, biomass production, water use efficiency, Kenya 6021
  Gliricidia sepium, biomass production, increment, Western Samoa 1668
  Grewia optiva, seedling growth, India 63
  insect pests, *Heteropsylla cubana, Leucaena,* India 629
  Larix, provenance trials, Poland 827
  Leucaena
    biomass production, cutting, Brazil 7723
    reclamation, mined land, Peninsular Malaysia 3240
  Leucaena diversifolia, Indonesia 1653
  Leucaena leucocephala
    Indonesia 1653
    Sri Lanka 5054
  multipurpose trees
    agroforestry
      acid soils, Cameroon 2542
      Rwanda 4961
      soil properties, soil types, Nigeria 6868
    fodder, production, Indonesia 3371
    fuel plantations, Nepal 6865
    fuelwood, India 1661
    India 1664, 1673
    Puerto Rico 1666
    reclamation
      desert soils, Egypt 3372
      fly ash, India 9248
      mine spoil, India 2404, 4949
      mined land
        Cuba 1540
        India 3246
      sodic soils, India 712
    saline soils, reclamation, Pakistan 6014
    shelterbelts
      irrigation, saline water, Saudi Arabia 2559
      soil properties, India 3689
    Zaire 8566
  nitrogen fixing trees, Nigeria 1665
  Paraserianthes falcataria, reclamation, mined land, agroforestry, Peninsular Malaysia 3241
  Pinus
    exotics, minor forest products, India, reviews 6870
    provenance trials, Venezuela 6024
    USA 5053
  Populus
    clones, breeding programmes, India 577

Species trials *cont.*
  Populus cont.
    France, growth, disease resistance, phenology 8560
  Populus 'G-3', shoot cuttings, India 63
  Populus tremula, hybrids, genetic variation, Sweden 9416
  Populus tremuloides, hybrids, genetic variation, Sweden 9416
  Prosopis
    Cape Verde 1667
    progeny testing, biomass production, USA 3137
  reclamation, polluted soils, oilfields, Russia 4950
  Sesbania grandiflora, biomass production, increment, Western Samoa 1668
  short rotation forestry, Republic of Georgia 2546
  water harvesting, savanna woodlands, rehabilitation, Kenya 6120
  woody plants, afforestation, mined land, reclamation, New Caledonia 9247
Spirostachys africana
  insect pests
    Tanaostigmodes tambotis
      South Africa
        biology 7492
        new species 7492
Spodoptera litura, insect pests, *Jatropha curcas,* India, biology 640
Spoil banks, broadleaves, natural regeneration, plant succession, Japan 1741
Spondias mombin, wood anatomy 4630
Spondias purpurea
  insect pests, *Prostephanus truncatus,* Mexico 7476
  plant water relations, drought, phenology, Costa Rica 2838
  shoot cuttings, seasonal variation 9441
Spondias radlkoferi, wood anatomy 4630
Squirrels
  Ratufa indica, Ficus, India, food plants 1514
  Ratufa macroura, nature reserves, riparian forests, India 695
  Sciurus, forest trees, UK, competitive ability 2389
  Sciurus aberti
    Pinus ponderosa
      cones, USA 8359
      USA
        damage 432
        feeding behaviour 6672
        nesting 5821
  Sciurus ingrami, seed predation, Brazil 10067
  Sciurus vulgaris
    coniferous forests, fragmentation, ecology, Sweden 2390
    UK, feeding behaviour 2391
    woodlands, fragmentation, Netherlands 6693
  Tamiasciurus hudsonicus
    coniferous forests, USA, ecology 3207
    Pinus contorta, Canada, prevention 1511
Sri Lanka
  Acacia, species trials 5054
  afforestation, lowland areas, mixtures 935
  agroforestry, land use, sustainability 3270
  arboreta, forests, Arid Regions, monographs 7611
  Azadirachta indica, species trials 5054
  broadleaved evergreen forests, mountain forests, synecology 1374
  broadleaves, foliage, chemical composition 3751
  Cinnamomum, plant composition, essential oils 416
  community forestry, development projects, non-governmental organizations, conferences 774
  deforestation, forest management, rural women, sustainability 4105
  Dipterocarpaceae, shelterwood system, natural regeneration, sustainability 921

Sri Lanka *cont.*

- *Eucalyptus*
  - forest nurseries, growing media 5115
  - species trials 5054-5055
- *Eucalyptus camaldulensis,* forest plantations, plant composition, nutrients 5294
- farm forestry, surveys, trees, products, utilization 1548
- forest influences, watersheds, runoff 2399
- forest management, participation, community forestry 8529
- forestry, bibliographies 13
- forests
  - land use, environmental degradation, nature conservation 1578
  - nature conservation, forestry development 1579
  - synecology, climate 1373
- *Gliricidia sepium,* provenance, nitrogen fixation, nodulation 3994
- insect pests, *Holotrichia serrata, Tectona grandis,* forest nurseries, chemical control 5782
- landscape ecology, land use, conservation, conferences 768
- *Leucaena leucocephala*
  - forest nurseries, growing media 5115
  - species trials 5054
- *Litsea gardneri,* foliage, polysaccharides 9817
- mangroves, fisheries 9232
- mountain forests, nature reserves 1375
- multipurpose trees
  - fodder, biomass production, contour cultivation 1799
  - medicinal plants, degraded forests 5851
- *Pinus caribaea,* forest plantations, soil properties 5348
- *Premna wightiana,* flora, geographical distribution 6522
- rain forests, nature reserves 5899
- *Semecarpus,* endangered species 10123
- shifting cultivation, soil conservation, water conservation 6731
- *Shorea*
  - light, rain forests, plant succession 7022
  - outcrossing 3034
- *Shorea megistophylla,* selective felling, reproductive behaviour, inbreeding 5425
- *Tectona grandis,* provenance trials 5056
- tropical forests
  - soil properties 5348
  - synecology, botanical composition 1368
- *Uvaria cordata,* endangered species 10123
- woody plants, checklists, books 3300

St Lucia, mangroves, forest management, charcoal 3085

Stability of stands (*see* Stand characteristics, stability)

Stand age

- classification, remote sensing, radar, relief, Germany 3515
- coniferous forests, soil chemistry, USA 8774
- deciduous forests, light penetration, USA 3556
- *Fagus sylvatica,* seed production, seed quality, Germany 2567
- rain forests, stand characteristics, Canada 6544
- wildlife, salamanders, coniferous forests, Canada 9221

Stand characteristics

- *Abies alba,* forest ecology, Italy 8667
- *Abies concolor,* vegetation types, USA 7281
- *Abies pinsapo,* canopy gaps, forest ecology, Spain 9024
- age, broadleaves, foliage, browse, nutritive value 3196
- age structure
  - mixed forests, synecology, canopy gaps, USA 4806
  - *Pinus flexilis,* USA 5167

Stand characteristics *cont.*

- Arecaceae, forest management, sustainability, Mexico 7327
- bamboos, *Gigantochloa scortechinii,* biomass production, Peninsular Malaysia 6962
- *Betula lanata,* Russia 2153
- *Betula pendula,* silviculture, Croatia 4363
- biomass production, altitude, India 3052
- boreal forests
  - air pollution, Russia 7994
  - biomass production, Canada, simulation 9596
- botanical composition
  - *Betula*
    - air pollution, nitrogen, USA 1155
    - synecology, geographical distribution, Russia 1353
  - bottomland forests, USA, simulation 1376
  - coniferous forests, forest fires, USA 3933
  - fens, groundwater, soil chemistry, Germany 8163
  - forest trees, natural regeneration, climatic change, Poland 7330
  - mixed forests
    - climate, simulation, Switzerland 3957
    - Russia 2145
    - topography, aspect, Japan 6274
  - *Pinus strobus,* seed trees, natural regeneration, USA 3094
  - *Pinus sylvestris,* Belarus 1364
  - *Quercus ilex*
    - abandoned land, mapping, Spain 7849
    - dehesa grasslands, rangelands, Spain 9924
  - spatial distribution, species diversity, broadleaved evergreen forests, Thailand 8996
  - topography, plant succession, Japan 9014
  - tropical forests, synecology, Sri Lanka 1368
- bottomland forests, irrigation, projects, Kenya 6574
- broadleaved evergreen forests, secondary forests, synecology, South Africa 516
- broadleaves
  - Italy 8658
  - plant competition, yield tables, simulation 6832
  - silvicultural systems, Belgium 949
  - understorey, India 5471
- canopy, wind, simulation, air flow 3534
- *Castanea sativa,* coppice, logging, Italy, temporal variation 8611
- *Castanopsis cuspidata,* seed dispersal, Japan 9960
- *Chamaecyparis obtusa,* logging, Japan, damage, growth 7108
- composition
  - geographical information systems, mapping, site factors, Norway 5021
  - mixed forests, mapping, Switzerland, simulation 246
- coniferous forests
  - remote sensing
    - simulation, USA 1039
    - USA 1345
- conifers
  - geographical distribution, Japan 4766
  - plant competition, yield tables, simulation 6827
- deciduous forests
  - thinning, USA 2165
  - USA 2141
- ethnobotany, riparian forests, Kenya 194
- *Fagus crenata*
  - natural regeneration, Japan 8985
  - transpiration, thinning, Japan 1927
- forest inventories, simulation, statistical analysis, Finland 5198
- forest management, multiple use, theory 8722
- forest ownership, remote sensing, classification, USA 6223

Stand characteristics *cont.*

- forest resources, France, coastal areas 9929
- forest trees
  - growing stock, Finland 4396
  - growth models
    - algorithms 4220
    - USA, forecasting 4221
  - secondary forests, USA, growth 7321
  - silvicultural systems, selection system, Germany 6132
- *Fraxinus excelsior,* basal area, Romania 8661
- fungal diseases, *Phellinus weirii, Pseudotsuga menziesii,* USA 4856
- *Juniperus virginiana,* sex ratio, Canada 549
- landscape, sampling, USA, variation 2166
- *Larix olgensis,* altitude, Korea Democratic People's Republic 1817
- mangroves, *Avicennia marina,* Pakistan 3961
- mortality
  - coniferous forests, remote sensing, USA 4445-4446
  - *Eucalyptus,* simulation, Australia 2504
  - forest plantations, Italy 951
  - *Libocedrus chilensis,* forest decline, Argentina, analysis 3019
  - measurement 6580
  - *Picea sitchensis,* stem form, increment, UK 9576
  - tropical forests, Venezuela 3122
- *Nothofagus,* New Zealand 3909
- *Picea,* remote sensing, simulation, USA 2754
- *Picea abies*
  - boreal forests, palaeoecology, Sweden 7259
  - forest decline, remote sensing, Sweden 1855
  - thinning, Sweden 9520
- *Picea glauca,* growth models, height, Canada 1838
- *Picea pungens,* silvicultural characters, Romania 8663
- *Picea rubens,* USA 3879
- *Pinus*
  - carbon cycle, books 6797
  - controlled burning, forest recreation, USA 6378
  - silvicultural systems, USA 7304
- *Pinus nigra,* natural regeneration, silvicultural systems, Italy 3429
- *Pinus pinaster*
  - forest inventories, sampling, France 4433
  - remote sensing, radar, biomass, France 3516
- *Pinus pinea*
  - edible species, seeds, production, Portugal 1797
  - plant competition, yield tables, simulation 6831
- *Pinus ponderosa,* virgin forests, USA, nature conservation 3956
- *Pinus rigida,* dendroclimatology, increment, USA 6763
- *Pinus sibirica,* forest plantations, Russia 5168
- *Pinus strobus,* USA 5445
- *Pinus sylvestris*
  - ground vegetation, roots, biomass production, Finland 7152
  - natural thinning, Sweden 3460
  - thinning, Sweden 9520
- *Pinus taeda,* stand density, increment, USA 947
- plant succession
  - simulation 5964
  - USA 3054
- population dynamics
  - *Banksia,* forest fires, plant water relations, Australia 6577
  - conifers, forest decline, simulation, Austria 6825
  - deciduous forests, height, USA 9961
  - forest trees, increment, USA, equations 9962

Stand characteristics *cont.*
- population dynamics *cont.*
  - *Metrosideros polymorpha*, evolution, USA 3989
  - mixed forests, USA 3965
  - mountain forests, climate, simulation, Canada 7332
  - rain forests, Ecuador 3952
  - tropical forests 3958
- *Populus tremuloides*, growth models, height, Canada 1838
- *Quercus*, geographical variation 3936
- *Quercus cerris*, deciduous forests, Italy 6546
- *Quercus frainetto*, silvicultural characters, geographical distribution, Italy 6391
- *Quercus robur*, forest decline, Croatia 4724
- rain forests, stand age, Canada 6544
- remote sensing
  - image interpretation, soil types, leptosols, Sweden 5205
  - Landsat, mapping, USA 4444
  - radar, simulation 9635
  - satellites, biomass, India 2761
- riparian forests, Madagascar 3083
- seed dispersal, recruitment 9022
- selection forests
  - France 916
  - measurement, methodology 3505
- stability
  - forest ecology, air pollution, methodology 6811
  - *Iriartea deltoidea*, Brazil, harvesting 1405
- stand structure
  - botanical composition, treelines, Korea Democratic People's Republic 8993
  - broadleaves, biomass production, India 1410
  - forest ecology, remote sensing, mathematics 1411
- surveying, canopy, *Pinus ponderosa*, measurement, techniques 4183
- thematic mapper, topography, Korea Republic 8742
- thinning, forest economics, decision making 9524
- wildlife, deciduous forests, simulation, USA 4226
- wind damage, forest trees, reviews 8759

Stand density
- *Betula platyphylla*, plant competition, Japan, yield forecasting 8697
- conifers
  - aerial photography, Japan 9637
  - forest plantations, growth models, equations 9586
- *Cryptomeria japonica*, increment, Japan 9536
- equations 6958
- *Fagus sylvatica*, buds, dormancy, phenology, Slovakia 7145
- forest trees
  - basal area, Romania, allometry 8662
  - natural thinning, growth models 9538
  - site class assessment, USA 1839
- fungal diseases
  - *Gremmeniella abietina, Pinus sylvestris*, Finland 1461
  - rust diseases, *Pinus contorta*, Canada 6631
- increment, multipurpose trees, fuel plantations, irrigated stands, Kenya 6131
- indexes 2687
- *Picea mariana*, site class assessment, Canada, methodology 4399
- *Pinus ponderosa*, increment, USA, statistical analysis 1840
- *Pinus sylvestris*
  - branches
    - evapotranspiration
      - Europe 7146
      - Russia 7146
  - forestry practices, stem form, Belarus 5156
- *Pinus taeda*
  - logging, simulation, USA 3493

Stand density *cont.*
- *Pinus taeda cont.*
  - stand characteristics, increment, USA 947
  - wood properties 4593
- *Populus*, short rotation forestry, spacing, methodology, estimation 2207
- *Pseudotsuga menziesii*
  - branches, forest litter, USA 4500
  - spacing, Italy, volume, biomass 9587
- *Quercus pyrenaica*, biomass production, forest litter, climate, Spain 1824
- *Robinia pseudoacacia*, intensive silviculture, biomass production, Korea Republic 8709
- sampling, estimation, simulation 1851
- stand development, botanical composition, *Prunus pensylvanica*, USA 1781
- thinning, forest management 8651

Stand development
- boreal forests, statistical analysis, Russia 1407
- broadleaves
  - climate, light, phenology, Italy 8665
  - Greece 4803
  - wetlands, Croatia, simulation 4807
- conifers, Canada, methodology 2169
- cycling 7956
- deer, *Alces alces, Betula alba*, Russia 7530
- *Dicorynia guianensis*, silvicultural characters, French Guiana 3706
- forest plantations, yield forecasting, growth models, Germany 4222
- forest trees
  - growth models
    - methodology 4216
    - natural thinning 5963
  - selective felling, natural regeneration, Japan, logging effects 6910
  - vegetation types, biomass production, India 6540
- insect pests
  - *Choristoneura fumiferana*
    - *Abies balsamea*, Canada 1412
    - conifers, simulation, Canada 4224
- *Larix decidua*, spacing, Germany 8660
- mortality, light, deciduous forests, USA 7328
- natural thinning, *Pinus pinaster*, biomass, simulation 6828
- *Nothofagus solandri*, wind, New Zealand 4797
- *Picea abies*
  - forest management, sustainability, Finland, simulation 9577
  - old fields, soil chemistry, Norway 7890
  - selection system, increment, Norway 9489
  - thinning, strip roads, Sweden 6983
- *Pinus contorta*, carbon cycle, respiration, USA 2851
- *Pinus maestrensis*, spacing, increment, Cuba 950
- *Pinus resinosa*, Canada, growth 4408
- *Pinus sylvestris*
  - light, Russia, simulation 7792
  - plant competition, Switzerland, growth, variation 3884
- *Pinus taeda*
  - foliage, climate, USA 6977
  - increment, simulation, USA 2707
- population dynamics, *Acacia victoriae*, Australia, simulation 3955
- *Populus balsamifera*, Canada 6579
- protection forests, remote sensing, Austria 245
- *Pseudotsuga menziesii*
  - biomass, plant nutrition, France 7074
  - forest fires, USA 379
- rain forests, mountains, Australia 5470
- *Taxus baccata*, silvicultural systems, Slovakia 6909
- tropical forests, canopy gaps, French Guiana 6570

Stand establishment
- cover crops, forest trees, mixtures, fertilizers, Germany 6923

Stand establishment *cont.*
- *Dalbergia sissoo*, forest plantations, irrigation, India 8630
- mortality, *Pinus*, afforestation, agricultural land, South Africa 7778
- survival, *Pinus*, site preparation, increment, Sweden 9504
- *Swietenia macrophylla*, afforestation, biomass distribution, Costa Rica, root systems 9530

Stand improvement, coppice, Mediterranean Region, conferences 8486

Stand structure
- *Abies*, plant competition, Japan, mixed forests 4798
- *Acacia tortilis*, forest influences, soil chemistry, Sudan 4598
- *Acer saccharum*, Canada 4764
- bamboos, *Chusquea tessellata*, biomass, Colombia 3080
- birds, *Picoides borealis*, USA 8367
- botanical composition
  - development, forest trees, natural regeneration, Poland 7329
  - tropical forests, simulation 4215
- broadleaved evergreen forests, natural regeneration, canopy gaps, Japan 8178
- broadleaves
  - coppice, snow damage, Japan 6267
  - wind damage, USA, growth 277
- canopy
  - light penetration, estimation, techniques 9534
  - simulation 7817
- canopy gaps
  - *Abies sachalinensis*, understorey, Japan, growth 8659
  - *Picea jezoensis*, understorey, Japan, growth 8659
- *Castanea sativa*
  - basal area, drainage, soil properties, Spain 9574
  - coppice, Italy 9535
- *Chamaecyparis pisifera*, light, Japan, natural regeneration, vegetative propagation 4801
- cloud forests, Colombia 1408
- composition, deciduous forests, secondary forests, China 4767
- conifers
  - natural regeneration, Japan 2168
  - selection forests, crown, Japan 4360, 6824
  - thinning
    - Japan, equations, growth 3479
    - photointerpretation, equations 8655
- *Cryptomeria japonica*, canopy, Japan, growth, plant morphology 6970
- deciduous forests, Korea Republic, classification 9008
- development, silviculture, forest management, theory 5191
- diameter
  - distribution, simulation 9580
  - *Jacaranda copaia*, secondary forests, natural regeneration, Peru 6578
  - logging, Sweden 5154
- disturbance, savanna woodlands, soil properties, Zimbabwe 8156
- *Eucalyptus globulus*, forest plantations, canopy, simulation 7817
- *Fagus*, natural regeneration, aspect, Japan 9001
- *Fagus orientalis*, natural regeneration, Iran, logging effects 6916
- *Fagus sylvatica*
  - increment, Croatia 4404
  - nature reserves, Slovenia 2682
- forest inventories, sampling, volume determination 9625
- forest trees
  - forest ecology, vegetation types, China 3073
  - French Guiana, growth 6985
  - Japan, climax communities, spatial distribution 8157
  - vegetation types, biomass production, India 6540

Stand structure *cont.*
- forests, synecology, natural regeneration, India 2167
- *Fraxinus pennsylvanica,* floods, erosion, Canada 3111
- layer structure, cloud forests, synecology, Mexico 7278
- mangroves, soil properties, Nigeria 7293
- *Manilkara bidentata,* wind damage, recruitment, Puerto Rico 1076
- mapping, equipment 3317
- mathematics, theory 6171
- *Melaleuca viridiflora,* controlled burning, epiphytes, Australia 3089
- mixed forests
  - increment, Belgium, forest management 6941
  - USA 7333
- mixtures, simulation, Germany 9581
- mountain forests, synecology, botanical composition, Ecuador 3071
- *Phyllocladus aspleniifolius,* natural regeneration, population ecology, Australia 3953
- *Picea abies*
  - protection forests, France, natural disasters 10090
  - selection system, Sweden 9485
  - simulation, Belgium 4359
- *Picea rubens,* clouds, acid deposition, USA 6261
- *Pinus,* genetic variation, resin tapping, Russia 197
- *Pinus contorta,* forest fires, USA 4809
- *Pinus kesiya,* deforestation, Thailand 10094
- *Pinus pinaster,* remote sensing, radar, France 3520
- *Pinus ponderosa*
  - canopy gaps
    - forest management, USA 8666
    - USA, analysis 8987
- *Pinus sylvestris*
  - growing stock, Finland, volume, increment 4397
  - natural regeneration, Sweden 7260
- *Pinus thunbergii,* Japan, multivariate analysis 9537
- population dynamics
  - *Kunzea ericoides*
    - dunes, New Zealand 4782
    - heathlands, New Zealand 4782
- *Pseudotsuga menziesii,* microclimate, USA 3459
- *Quercus cerris,* coppice, silvicultural conversion, Italy 8609-8610
- *Quercus ilex,* canopy, plant water relations, Spain 2840
- rain forests
  - biodiversity, Australia 2155
  - selective felling, Indonesia, logging effects 1738
  - simulation, Australia, site factors 3896
  - synecology
    - botanical composition
      - Australia 3055
      - Ecuador 3071
      - New Zealand 3076
- remote sensing
  - multispectral imagery, Canada, simulation 8739
  - photosynthesis, vegetation types, USA 5199
  - radar, understorey, techniques 7009
- riparian forests
  - biodiversity, Belize, palaeoecology 3960
  - forest litter, Argentina 3081
  - species diversity, natural regeneration, Brazil 8177
- savannas, South Africa, damage 4804
- secondary forests
  - biomass, Brunei Darussalam, estimation 6939
  - synecology, botanical composition, Ecuador 3072
- *Shorea robusta,* degraded forests, synecology, India 213
- silviculture, growth models, simulation 4199

Stand structure *cont.*
- spatial distribution
  - deciduous forests
    - plant competition
      - Czech Republic 3108
      - Poland 3108
  - mixed forests
    - plant competition
      - Czech Republic 3108
      - Poland 3108
- stability, forest trees, USA 550
- *Thujopsis dolabrata,* natural regeneration, Japan, history 3433
- *Tsuga canadensis,* USA, age 4799
- xerophytes, Arid Regions, natural regeneration, Madagascar 8998

Stand tables
- diameter, *Pseudotsuga menziesii,* interspecific competition, weed control, USA 2709
- forest inventories, statistical analysis 6217

Standards
- amenity trees
  - planting, planning, urban areas, UK 10139
  - root systems, interactions, building construction, UK 10140
- gene banks 9029

Statistical analysis
- *Abies,* dendrochronology, increment, basal area, Germany 793
- *Acacia auriculiformis,* provenance trials, data processing, South East Asia 29
- *Acacia mearnsii,* site class assessment, soil depth, South Africa 1002
- *Acer macrophyllum,* woody weeds, herbicides, USA 9515
- birds, ecology, selective felling 2502
- boreal forests, stand development, Russia 1407
- coniferous forests, synecology, layer structure, Norway 3941
- conifers, forest plantations, site class assessment, Argentina 225
- deciduous forests, forest borders, Canada 5962
- equations, testing 6820
- *Eucalyptus tereticornis,* forests, soil chemistry, India 1901
- factorial analysis, experimental design 9350
- *Fagus sylvatica*
  - forests, synecology, Spain 2142
  - synecology, plant communities, Germany 3327
- forest inventories
  - sampling 1021, 4436
    - Germany 1020
    - Switzerland 7836
  - stand characteristics, simulation, Finland 5198
  - stand tables 6217
- forest management, decision making, forest inventories 2726
- forest trees
  - natural regeneration, Germany, spatial distribution 7774
  - plant nutrition, silviculture 5014
  - progeny testing, early selection, France 1419
- *Fraxinus excelsior,* plant competition, increment, Germany, mixtures 791
- fungal diseases, *Discula destructiva, Cornus florida,* USA 9351
- *Joannesia princeps,* wood density, growth effects 1179
- kriging, precipitation, Germany 792
- mathematics, techniques 9346
- mountain forests, botanical composition, site factors, Mexico 3895
- *Picea abies*
  - forest decline, Germany 4198
  - provenance trials, Germany 8559
- *Picea rubens,* forest decline, dendrochronology, USA 5915
- *Pinus banksiana*
  - cones, life tables, Canada 3843
  - tree breeding, increment, Canada 794
- *Pinus elliottii,* genetic variance, heritability 8507

Statistical analysis *cont.*
- *Pinus nigra,* volume determination, remote sensing, radar, UK 3519
- *Pinus radiata*
  - agroforestry, plant competition, foliar diagnosis, New Zealand 4957
  - population genetics, isoenzymes 5482
  - site class assessment, geographical information systems, New Zealand 4402
  - thinning, experimental design, New Zealand 5015
- *Pinus sylvestris,* roots, distribution, soil types, Kazakhstan 6408
- *Pinus taeda,* volume determination 8505
- *Populus,* photosynthesis, diurnal variation, seasonal variation 8936
- regression analysis 2503, 7672
- remote sensing
  - land use, change 261
  - mapping, USA 3521
  - vegetation types
    - Australia 1856
    - classification 1035
- risk assessment
  - acid deposition 4196
  - forest economics, Germany 4197
- *Shorea robusta,* forests, soil chemistry, India 1901
- site class assessment, increment 2706
- surveying, sampling, mapping 2759
- *Tectona grandis,* forests, soil chemistry, India 1901
- *Tilia cordata,* plant competition, increment, Germany, mixtures 791
- tree breeding, experimental design 794, 2447
- volume determination, remote sensing, photogrammetry, Germany 1034
- wildlife, birds, cavities in trees, simulation 2509
- wood properties, correlation, growth rings 31
- work study, activity sampling 30

Statistics
- forest fires, Canada, costs, analysis 4606
- forestry
  - Albania 9377
  - Estonia 9378
  - Poland 9379
- *Populus,* silviculture, Italy 6135
- *Quercus,* genetic diversity, chloroplast genetics, theory 7374
- research, experimental design 8504

Stator beali, insect pests, *Pithecellobium ebano,* seeds, damage, Mexico 4039

Stegophora ulmea, fungal diseases, *Ulmus,* resistance, molecular genetics 8306

Stem form (*see also* Form factors)
- broadleaved evergreen forests, increment, crown, South Africa 224
- broadleaves
  - snow, Japan, resistance 2954
  - USA 8692
- buttresses
  - broadleaves, plant competition, Papua New Guinea 3876
  - forest trees, crown, Central America 2958
- conifers, volume determination, merchantable volume, equations 1822
- *Cryptomeria japonica,* Japan, volume, equations 4193
- eccentricities
  - *Fagus sylvatica,* genetic variation, Europe 5519
  - forest trees, measurement, methodology 2932
  - *Pinus kesiya,* thinning, Madagascar 4634
- *Eucalyptus delegatensis,* provenance trials, increment, diameter, New Zealand 4258
- *Eucalyptus fastigata,* volume determination, equations 5169
- *Eucalyptus regnans,* wood density, wind 351
- forest trees, growth rings, canopy, simulation 4209

Stem form *cont.*
- forking and multiple stems
  - *Picea sitchensis,* increment, mortality, UK 9576
  - *Pinus cembra,* Switzerland 6394
- *Nauclea diderrichii,* spacing, increment, Cameroon 3458
- *Picea mariana,* increment, treelines, Canada 2688
- *Pinus,* Australia 6166
- *Pinus flexilis,* population genetics, USA 3708
- *Pinus radiata*
  - genetic variation
    - increment, New Zealand 4818, 4821
    - plant nutrition, nitrogen 2949
    - seedling growth, New Zealand 4819
  - provenance trials, increment, Chile 6027
- *Pinus sylvestris*
  - spacing, increment, Finland 6937
  - stand density, forestry practices, Belarus 5156
- *Podocarpus totara,* provenance trials, seedling growth, New Zealand 69
- *Populus,* increment, Australia 7716
- *Populus maximowiczii,* mechanics, seedlings, Japan 1231
- *Pseudotsuga menziesii*
  - genetic variation, USA, increment 2182
  - heritability, France 8215
- taper
  - equations 5019, 6819, 9578
    - *Nothofagus,* Chile, secondary forests 6169
    - USA 995
  - estimation, broadleaves, volume determination, USA 4382
  - forest trees, simulation 4201
  - *Picea abies,* volume, Denmark, equations 991
  - *Pinus,* volume determination, equations 7815
  - *Pinus contorta,* Canada 4385
  - *Pinus pinaster*
    - site factors, Morocco 8862
    - volume determination, Spain 788
  - *Robinia pseudoacacia,* allometry, USA 6409
- *Thujopsis dolabrata,* roots, snow damage, Japan, plant morphology 4631
- volume, *Pinus radiata,* phosphorus fertilizers, Australia 5105

Stemflow
- *Azadirachta indica,* throughfall, interception, India 706
- chemistry
  - coniferous forests, Canada 1991
  - deciduous forests, Canada 1991
- conifers, bark, France, pH, conductivity 3021
- *Cryptomeria japonica,* chemistry, carbon, measurement 7125
- forest trees, acid deposition, soil chemistry, Japan 7999
- nutrients, *Ceratopetalum virchowii,* adventitious roots, Australia 391
- pH, forest trees, soil chemistry, acidification, Japan 1992
- *Quercus leucotrichophora,* throughfall, interception, India 706
- *Rhododendron arboreum,* throughfall, interception, India 706

Stems
- *Abies alba*
  - snow damage, Italy 280
  - wind damage, Italy 280
- *Abies sachalinensis,* computer techniques 1624
- anatomy
  - morphology, development, bamboos, *Dendrocalamus giganteus* 6418
  - *Thuja occidentalis,* plant water relations, Canada 2936
- *Casuarina cunninghamiana,* nodulation, nitrogen fixation, Réunion 2238
- cold tolerance, *Cornus sericea,* buds, dormancy, heat stress 7037

Stems *cont.*
- conifers, wind damage, Japan, shakes, distribution 9678
- *Cryptomeria japonica*
  - crown, Japan, growth 8698
  - thinning, crown, simulation 4352
  - wind damage, plant morphology, Japan 4479
- deformation, *Picea mariana,* forest nurseries, Canada 1729
- forest trees
  - diameter, equations 1830
  - growth models 1820
  - growth rings, distribution, equations 3715
  - height, equations 1830
  - water storage, tropical forests, Costa Rica 4521
- fungal diseases, *Larix leptolepis,* Japan, damage 4858
- *Larix,* Canada, major elements, distribution 4666
- *Liquidambar styraciflua,* internodes, growth 8052-8053
- mechanics 408
  - breakage
    - *Eucalyptus,* cavities in trees, Australia 5372
    - forest trees, cavities in trees 5372
  - broadleaves, wind, Japan 1221
  - *Picea sitchensis*
    - wind, turbulence, UK 6271
    - wind damage, UK 6272
  - rays 1218
- monoterpenes, insect pests, attractants, *Picea abies,* Austria 2354
- morphology
  - bamboos
    - *Bambusa,* age, Bangladesh 6419
    - *Melocanna baccifera,* age, Bangladesh 6419
  - canes and rattans, *Calamus subinermis,* increment, Sabah 7804
- nutrients, distribution, *Larix,* Canada 5291
- *Picea abies*
  - growth models, France, morphology 5018
  - Sweden, damage, cracks 4637
- *Pinus sylvestris,* dormancy, bending, stresses 2937
- plant parasitic nematodes, *Bursaphelenchus xylophilus, Pinus densiflora,* respiration 4895
- *Pseudotsuga menziesii,* maturation, ontogeny, measurement 4652
- quality, *Betula pendula,* thinning, wood properties, Western Europe 9519
- *Quercus acutissima,* pruning, transplanting, growth 3773
- *Quercus alba,* respiration, carbon dioxide enrichment 6475
- *Quercus petraea,* frost injury, assessment 4476
- roots, mechanics 9797
- stem form, breakage, *Pinus patula,* provenance trials, South Africa 61
- *Taxus yunnanensis,* taxanes 9807

Stenocarpus sinuatus, rain forests, seeds, survival, predation, Australia 4050

Stenocereus griseus, birds, fruits, predation, Venezuela 6514

Stephanopodium magnifolium, taxonomy, Brazil, new species 8962

Steppe (*see* Vegetation types, steppes)

Sterculia apetala, wood anatomy, wood properties 6428

Sterculia foetida, foliage, chemistry, fodder, India 7170

Sterculia quadrifida, natural regeneration, rain forests, ecotones, Australia 3935

Sterculia urens, shoot cuttings, India 104

Sterculia villosa, multipurpose trees, fibre plants, India 2678

Stereonychus fraxini, insect pests, *Fraxinus excelsior,* host parasite relationships 5748

Sterigmapetalum, new species, South America 9901

Sterigmapetalum chrysophyllum, taxonomy, Venezuela 9901

Sterigmapetalum plumbeum, taxonomy, Brazil 9901

Stilbosis quadricustatella, insect pests, *Quercus virginiana,* USA, resistance 7447

Stomata
- *Acacia,* genetic variation, taxonomy 4648
- broadleaves, photosynthesis, transpiration, diurnal variation 456
- conifers
  - foliage, waxes, dry deposition 8841
  - palaeoecology, Canada 8146
- density
  - broadleaves, foliage, carbon dioxide enrichment, Italy 2048
  - *Salix herbacea,* carbon dioxide, atmosphere, palaeoclimatology 3538
  - woody plants, taxonomy, habitats 8061
- distribution
  - *Abies alba,* foliage, photosynthesis 2948
  - *Picea abies,* foliage, photosynthesis 2948
- *Eucalyptus grandis,* photosynthesis, simulation 6468
- *Larix decidua,* altitude, Austria, ozone, uptake 7187
- leaf conductance
  - *Eucalyptus tetrodonta,* seedlings, carbon dioxide enrichment 3597
  - *Maranthes corymbosa,* seedlings, carbon dioxide enrichment 3597
- oscillation, mangroves, *Avicennia germinans,* leaf water potential 2839
- *Pinus taeda,* light, plant physiology 7026
- responses
  - *Aningeria adolfi-friederici,* water stress 5278
  - *Cordia africana,* water stress 5278
  - *Ekebergia capensis,* water stress 5278
  - *Olea europaea,* water stress 5278
  - *Podocarpus gracilior,* water stress 5278
- *Tephrosia,* taxonomy, India 5428

Stomatal movement, *Quercus macrocarpa,* light, photosynthesis 2991

Stomatal resistance
- *Betula papyrifera,* gas exchange, simulation, Canada 801
- broadleaves
  - plant water relations
    - abscisic acid
      - Germany 2083
      - Israel 2083
      - USA 2083
- *Populus tremuloides,* gas exchange, simulation, Canada 801

Storage
- cold storage, conifers, planting stock, research, reviews 4310
- thawing, *Picea,* seedlings, plant physiology, recovery 6080

Storms, landslides, logging, USA, simulation 9768

Stream training
- dams, Italy, design, construction 10084
- riparian forests, plant succession, USA 543

Streams
- *Atherosperma moschatum,* forest litter, rain forests, Australia 7896
- *Bacillus thuringiensis* subsp. *kurstaki,* bacterial insecticides, nontarget effects, Canada 6644
- broadleaves, forest litter, UK, fauna 5252
- chemistry
  - afforestation, forest influences, soil chemistry, UK 10083
  - *Liriodendron tulipifera,* foliage, decomposition, USA 7917
  - *Picea sitchensis,* forest influences, acid deposition, UK 8868
  - silviculture, USA 9235
- clear felling, cycling, soil chemistry, USA 2907

- **Streams** *cont.*
  - coniferous forests
    - nitrogen fertilizers
      - Sweden
        - aquatic animals 9458
        - water quality 9458
  - conifers, runoff, Japan, chemistry 1533
  - fauna, clear felling, Australia 3679
  - forest fires
    - aquatic invertebrates, USA 8033
    - erosion, Canada, sediment yield 8884
  - forest litter
    - forest fires, USA 4498
    - USA 6290
  - forest trees, forest influences, Japan, chemistry 4599
  - logging
    - erosion, water quality, USA 4578
    - USA, damage, ecology 4936
    - water quality, Peninsular Malaysia 7109
  - morphology, slash, mountain forests, watersheds, USA 6698
  - nitrate, forest plantations, age, basal area, UK 8864
  - nitrogen, forest influences, UK 8025
  - pH
    - broadleaves, forest litter, decomposition, USA 8781
    - *Picea sitchensis,* forest plantations, UK 354
  - *Picea sitchensis*
    - afforestation, wetlands, water quality, UK 4081
    - air pollution, salt spray, UK, water quality 7874
  - *Prunus serotina,* forest litter, decomposition, USA 7898
  - riparian forests
    - forest litter, decomposition, USA 5253
    - protection forests, USA 4076
  - riparian vegetation, natural regeneration, forest influences, USA 2170
  - salinity, broadleaves, plant colonization, USA 6565
  - *Salix setchelliana,* seedlings, establishment, USA 8173
  - water quality, fishes, conifers, forest ecology, USA 2170
  - water temperature, *Pinus radiata,* forest plantations, New Zealand 8376
  - watersheds, hydrology, forest influences, UK 2906
- ***Streblus,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- ***Streblus asper,*** air pollution, foliage, damage, India 5328
- ***Streblus brunonianus,*** pollen, release, Australia 1312
- **Street trees** (*see also* Ornamental woody plants)
  - *Acer platanoides,* light, USA 8459
  - air pollution
    - dust, damage, Pakistan 4550
    - sulfur dioxide, salt injury, Europe 3644
  - broadleaves
    - climate, USA, stress, tolerance 4985
    - pruning, USA, wood residues 4983
  - dangerous trees
    - assessment, wind damage 10152
    - safety devices, Germany 10148
  - foliage, heat stress 8758
  - fungal diseases, *Ceratocystis fimbriata, Platanus,* Europe 5646
  - ice damage, USA 8460
  - insect pests, *Disholcaspis quercus-mamma, Quercus macrocarpa,* USA 7491
  - Italy, management, planning 9308
  - *Liquidambar styraciflua,* electrical phenomena in trees, USA, measurement 778
  - Mexico, surveys 4982
  - microclimate, noise abatement, China 10156
  - plant nutrition, tree injection, nutrients, soil air, UK 10143
  - *Platanus acerifolia*
    - Italy, Arachnida, surveys 10025
- **Street trees** *cont.*
  - *Platanus acerifolia cont.*
    - salt injury, UK 346
  - *Populus acerifolia,* buds 6422
  - pruning, plant morphology, techniques 7610
  - *Pyrus calleryana,* USA, growth, assessment 4986
  - roots, Sweden, damage, sewerage, systems 5911
  - sampling, statistical methods 3287
  - seedling growth, seeds, pollution, vehicles, Pakistan 10155
  - species diversity, USA, surveys 2438
  - stems, wood strength, defects, measurement 7651
  - urban forestry
    - amenity trees, USA 740
    - China 2435
- ***Strepsicrates ejectana,*** insect pests, *Eucalyptus deglupta,* Philippines, damage, control 1476
- ***Streptomyces,*** bacterial diseases, reviews 9123
- **Stress factors,** broadleaves, forest health, Netherlands 1296
- ***Strix occidentalis***
  - birds
    - conservation, forest economics, USA 732
    - USA, nesting, habitats 6684
- ***Strix occidentalis caurina,*** birds, nature conservation, forest economics, USA 5820
- ***Strombosia glaucescens,*** wood anatomy, Ghana 6402
- ***Strophanthus,*** foliage, photosynthesis, plant water relations, Cameroon 313
- ***Strophosomus capitatus,*** insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
- ***Strychnos lucida,*** foliage, chemistry, Australia 7081
- ***Strychnos nux-vomica,*** medicinal plants, callus, indole alkaloids 9564
- ***Strychnos potatorum,*** medicinal plants, antiviral properties 8688
- ***Stryphnodendron,*** pollen, morphology, taxonomy 393
- ***Stryphnodendron adstringens,*** insect pests, *Atta sexdens rubropilosa,* Brazil 7489
- ***Stryphnodendron microstachyum***
  - afforestation, pastures, Costa Rica, stem form, growth 5051
  - soil chemistry, nitrogen, mineralization, Costa Rica 5247
- ***Stryphnodendron pulcherrimum***
  - plant water relations, water stress, drought resistance 2570
  - seed treatment, temperature, seed germination 2570
- **Stump removal,** broadleaves, chemical treatment 5133
- **Stumpage value**
  - adjustment, USA 6244
  - Canada 9652
  - forest economics
    - Costa Rica, discount rates, cash flow 9654
    - Poland, equations 1869
  - forest inventories, forest management, Sweden, economic evaluation 3504
  - forest trees
    - Canada 9651
    - Korea Republic 8748
    - USA, forest ownership, analysis 2778
  - prices, USA 1055
  - *Quercus robur,* forest decline, Croatia 4459
  - USA, models, statistical analysis 4455
- **Stumps**
  - conifers, roots, decay fungi, Sweden 9989
  - *Pseudotsuga menziesii,* Collembola, plant succession, Canada 4028
- ***Sturnus vulgaris,*** birds, bamboos, USA, habitats, bird control 6677
- ***Styloceras laurifolium,*** choice of species, forestry development, South America, handbooks 2551
- **Styracaceae,** pollen, morphology, taxonomy 392
- ***Styrax tonkinensis***
  - silviculture
    - Lao 2662
    - Vietnam 2662
- ***Suaeda monoica,*** salt tolerance 7041
- **Subsidies**
  - afforestation
    - agricultural land, carbon cycle, USA 5986
    - Germany 9402
    - Italy 1638
  - broadleaves, afforestation, agricultural land, forest economics, Italy 159
  - *Populus,* short rotation forestry, Italy, setaside 1640
- **Succession** (*see* Plant succession)
- **Suckering**
  - *Dacrydium xanthandrum,* roots, natural regeneration, Sabah 7159
  - *Robinia pseudoacacia,* genetic variation, coppicing, USA 2211
- **Sudan**
  - *Acacia senegal,* genetic improvement 3992
  - *Acacia tortilis,* stand structure, forest influences, soil chemistry 4598
  - forest management, sustainability 9397
  - insect pests, *Acacia* 7428
  - vegetation, degradation 1399
- ***Suillus bovinus***
  - mycorrhizas
    - *Pinus,* plant nutrition, nitrogen 5604
    - *Pinus contorta,* competition 8271
    - *Pinus sylvestris,* plant nutrition 5581
- ***Suillus collinitus***
  - mycorrhizas
    - *Pinus halepensis*
      - fertilizers, refuse, Spain 4002
      - seedling growth, Spain 4844
    - *Pinus pinaster*
      - seedlings
        - nutrition physiology 8257
        - rhizosphere, pH 8257
- ***Suillus grevillei,*** mycorrhizas, forest trees, chemistry 8274
- ***Suillus lakei,*** mycorrhizas, *Pseudotsuga menziesii,* forest litter, decomposition 4005
- ***Suillus luteus***
  - ectomycorrhizas, *Quercus rubra,* forest nurseries, USA 3149
  - mycorrhizas, *Pinus halepensis* 8285
- ***Suillus variegatus***
  - mycorrhizas
    - *Picea abies,* induction, cell culture, callus 8258
    - *Pinus halepensis* 8285
    - *Pinus sylvestris,* heavy metals, toxicity 5601
- ***Sula abbotti,*** birds, nature conservation, mined land, reclamation, Christmas Island 3234
- **Sulfur,** cycling, watersheds, forest influences 1950
- **Sunscald** (*see* Insolation)
- **Support trees,** multipurpose trees, crops 9269
- **Surveying** (*see also* Forest inventories; Soil surveys)
  - forest management, multiple use, conferences 6809
  - global positioning systems
    - Canada, testing 7000
    - Italy 8740, 9636
  - sampling, mapping, statistical analysis 2759
  - stand characteristics, canopy, *Pinus ponderosa,* measurement, techniques 4183
- **Surveys**
  - Cycadopsida, endangered species, conservation 3703
  - farm forestry, Asia, trees, products, utilization 1548
  - forest economics, private forestry, UK 4462
  - forest resources, assessment 3522
  - insect pests
    - *Paraserianthes falcataria*
      - forest nurseries, India 2300
      - forest plantations, India 2300

Surveys *cont.*
- vegetation types, geographical information systems, Australia, sampling 7014

Sus scrofa
- agroforestry, UK 3264
- wildlife, vegetation types, Spain, habitats 7516

Sustainability
- *Acacia,* Egypt, charcoal 3913
- agroforestry, development, economics 10097
- biodiversity, nature conservation, forestry, India 4974
- deforestation
  - Africa, policy 9262
  - forest management, rural women, Sri Lanka 4105
  - land use, Brazil 720
- environmental management, mountain areas, Asia, books 2453
- forest management 5196
  - Canada 3491
  - Ghana 2723
  - India 1014
  - logging, mountain forests, Sarawak 6988
  - planning, Papua New Guinea 4413
  - private organizations 1013
  - USA, logging 1846
  - yield regulation, history 8513
- forest resources
  - forest management, planning 8719
  - forest policy, forest management, models 5190
- forestry
  - nature conservation, South Africa 7594
  - research 5996
- forestry development
  - forest management, India 5030
  - nature conservation, projects 8515, 9371
- *Juniperus thurifera,* forest management, Morocco 1015
- nature conservation, forest management, climatic change, land use, conferences 19
- rain forests
  - conservation, biodiversity, Ecuador 9300
  - land use, biodiversity, Brazil 3352
- silvicultural systems, selective felling, simulation, Philippines 920
- silviculture, forest management 6106
- tropical forests
  - forest management 1012
  - nature conservation, forest management, Developing Countries 5857-5858

Sustained yield (*see* Yield regulation)

Swartzia cubensis, wood anatomy 4629

Swartzia madagascariensis
- micropropagation, culture media 5076
- seed germination, seedling growth, soil chemistry, carbon, Zambia 5239

Swaziland
- *Pinus patula,* forest plantations, rotations, forest litter 7895
- silviculture, organizations, handbooks 7699

Sweden
- accident prevention, private forestry 8550
- acid deposition
  - soil chemistry
    - hydrology, simulation 1905
    - simulation 8510
- *Alnus glutinosa,* plant succession, synecology 1397
- *Alnus incana*
  - biomass production, roots, growth 6189
  - short rotation forestry, thinning 7769
- amenity value of forests, non-wood forest products, valuation 9650
- bacterial diseases, *Pseudomonas syringae,* Salicaceae 8317
- *Betula,* farm forestry, natural regeneration, artificial regeneration 6921
- *Betula pubescens*
  - pollination 3039

Sweden *cont.*
- *Betula pubescens cont.*
  - roots, chemistry, seasonal variation 9826
- *Betula tortuosa*
  - abscission, plant nutrition, resorption 6482
  - snow cover, indicator species 1877
- birds
  - Corvidae, landscape, behaviour, predation 694
  - *Dryocopus martius,* coniferous forests, fragmentation, ecology 1521
  - foraging, *Formica aquilonia,* effects, *Picea abies* 5828
- boreal forests
  - forest ecology, Coleoptera, species diversity 1471
  - remote sensing
    - satellites, forest inventories 7006
    - thematic mapper 6229
- broadleaves
  - forest litter, cycling 2820
  - soil pH, soil organic matter 2816
- climatic change, energy resources, forestry 4471
- coniferous forests
  - acid deposition, soil chemistry 344
  - air pollution
    - indicator plants 8002
    - mercury, deposition 8851
  - mercury, deposition, watersheds 8853
  - nitrogen fertilizers
    - streams
      - aquatic animals 9458
      - water quality 9458
  - remote sensing, solar radiation 1859
- conifers
  - air pollution
    - soil chemistry, nitrates, soil solution 5246
    - throughfall, soil chemistry, nitrates 5245
  - foliage, life tables 8056
  - forest fires, natural regeneration, age of trees, history 3064
  - forest influences, nutrients, distribution 7129
  - nitrogen fertilizers, understorey 2611
  - roots
    - air pollution, soil, distribution 5319
    - stumps, decay fungi 9989
    - testing, tetrazolium compounds 1885
  - soil properties, climate 9683
  - synecology, species diversity, simulation 5965
  - transpiration, sap flow 7061
  - water uptake, tracers 8814
- deciduous forests, forest ecology, Coleoptera, species diversity 1471
- deer
  - *Alces alces*
    - *Pinus sylvestris*
      - browse 10069
      - browsing, simulation 10071
- endangered species 4126
- epiphytes, forest trees, air pollution, indicator plants 6334
- *Fagus sylvatica*
  - fertilizers, plant nutrition, plant composition 8594
  - ground vegetation
    - plant nutrition, acid deposition 3755
    - soil, acidification 8164
    - soil chemistry, exchangeable cations 7885
  - stem form, eccentricities, genetic variation 5519
- farm forestry, land evaluation, mathematical models 6243
- fertilizers, sewage sludge, legislation 8593
- forest decline, air pollution 4564
- forest ecology, climatic change, simulation 3110
- forest influences, watersheds, hydrology 5836

Sweden *cont.*
- forest inventories
  - data processing, diameter, growth models 9599
  - forest management, stumpage value, economic evaluation 3504
  - sampling, methodology 6212
  - valuation, remote sensing, satellites 5216
- forest litter, decomposition, nutrients, heavy metals 9700
- forest management
  - forest economics
    - simulation 3527
    - valuation 1053
  - planning
    - forest inventories, sampling 7673
    - policy, sustainability, economics 9647
- forest nurseries, seedlings, testing, quality 9477
- forest policy
  - forest management, biodiversity, nature conservation 9387
  - history 4236
- forest recreation, valuation 8745
- forest resources, acid deposition, growth 3674
- forest trees
  - forest litter
    - chemical composition 4494
    - decomposition 6281
  - natural regeneration, clear felling 3439
  - soil chemistry, acidification, clay minerals 291
  - soil pH, calcium, aluminium 3572
- forestry
  - European Union, membership 1627
  - history 5973
  - hydrology, clear felling, drainage, flooding 4932
  - international trade, history 2517
  - periodicals 2443
- forestry machinery, mechanization, environmental impact 5158
- *Fraxinus excelsior,* plant succession, synecology 1397
- fungal diseases
  - *Armillaria, Picea abies,* thinning 5625
  - *Gremmeniella abietina, Pinus contorta* 4867
  - *Heterobasidion annosum*
    - *Picea abies,* thinning 5624-5625
    - resistance 9102
  - *Phellinus tremulae, Populus tremula,* population genetics 8289
  - *Picea abies,* statistics 10007
- hydrology, runoff, chemistry, methylmercury 8795
- insect pests
  - *Cinara costata, Picea abies,* water stress, pest resistance 10032
  - Coleoptera
    - *Picea abies,* snow damage, susceptibility 10045
    - *Pinus sylvestris*
      - interactions, *Thanasimus formicarius* 7485
      - snow damage, susceptibility 10045
  - Curculionidae, *Pinus sylvestris* 3435
  - *Dasineura, Salix* 7496
  - *Dasineura marginemtorquens, Salix viminalis,* galls 5772
  - *Euphydryas maturna, Viburnum opulus, Fraxinus excelsior,* parasitoids 5708
  - *Gilpinia hercyniae, Picea abies,* water stress, pest resistance 10032
  - *Hylobius abietis*
    - conifers
      - control 10054
      - shelterwood system 4041
  - *Ips typographus*
    - reserved forests
      - incidence 10044
      - predators 10044

Sweden *cont.*

- insect pests *cont.*
  - Lepidoptera, *Betula,* population dynamics, interactions 5714
  - *Microdiprion pallipes, Pinus* 9173
  - *Neodiprion sertifer, Pinus sylvestris,* control 7504
  - *Tomicus piniperda*
    - *Pinus sylvestris*
      - control
        - natural enemies 2383
        - traps 2383
      - pruning, resistance 3183
- land use, multiple use, conferences 6804
- mycorrhizas, *Pinus* 8259
- peat soils, gases, *Pinus sylvestris* 2808
- *Picea,* watersheds, acid deposition, interception, recovery 6339
- *Picea abies*
  - air pollution, nitrogen, soil fertility, yield forecasting 7981
  - boreal forests
    - forest management, forest ecology 10029
    - palaeoecology, stand characteristics 7259
  - canopy, snow, evaporation, measurement 2905
  - clear felling
    - site preparation, artificial regeneration 9541
    - whole tree logging
      - carbon cycle, simulation 4535
      - soil water, chemistry 3569
  - clones, genotype mixtures, increment, height 1422
  - defoliation, air pollution, vehicles, aerial photography 1167
  - fertilizers
    - ammonium sulfate, cycling 2614
    - irrigation, plant nutrition 4538
  - foliage
    - chemistry, air pollution, indicator plants 1152
    - essential oils, ozone 6446
    - oleoresins, monoterpenes, genetic variation 1421
  - forest decline, remote sensing, stand characteristics 1855
  - forest litter, decomposition, chemistry, fertilizers 3580
  - forest management, simulation 2513
  - forest plantations
    - agricultural land, pulpwood production, wood properties 8007
    - beating up, increment, plant morphology 9529
  - frost injury, provenance trials 7872
  - increment, diameter, root and butt rots 8712
  - liming, roots, soil chemistry 9460
  - logging effects, logs, fungi 7254
  - mycorrhizas
    - air pollution 5580
    - nitrogen fertilizers, soil water regimes 8260
  - natural regeneration, shelterwood system 9488
  - nitrogen cycle, soil chemistry, ground vegetation, methodology 1145
  - nutrient balance, fertilizers, irrigation 7966
  - palaeoecology
    - pollen analysis 3068
    - vegetation, history, dendrochronology 7613
  - photosystem ii, spring, recovery 6496
  - plant water relations 2831
  - pollination, fertilization 2107
  - provenance trials
    - hybrids, genetic variation, increment 824
    - plant competition 2178
  - reproductive behaviour, seed orchards, root pruning, plant growth regulators 3828
  - root systems
    - drought, fertilizers 8047
    - fertilizers, soil chemistry, rhizosphere 7749

Sweden *cont.*

- *Picea abies cont.*
  - roots
    - nutrient uptake
      - fertilizers 9788
      - irrigation 9788
    - vigour, fertilizers 7750
  - seed orchards, genetic variation, pollination 9969
  - seedlings
    - cold injury, damage 9675
    - mycorrhizas, lime 6616
  - selection system, stand structure 9485
  - shelterwood system, natural regeneration, artificial regeneration 9541
  - shoot cuttings, cold injury, damage 9675
  - silvicultural systems
    - shelterwood system, wind damage 3559
    - understorey, species diversity 9484
  - site class assessment, soil chemistry, topography 2708
  - site preparation, slash, cycling 3445
  - soil amendments, roots 3419
  - soil biology, soil amendments, wood ash, soil chemistry 893
  - soil chemistry
    - nitrates, indicator plants, seasonal variation 24
    - nitrogen 7888
    - rhizosphere, roots, distribution 9684
  - spacing
    - increment 3457
    - wood density 9757
  - stand development, thinning, strip roads 6983
  - stems, damage, cracks 4637
  - thinning, stand characteristics 9520
  - throughfall, deposition, chemistry 1532
  - water stress, planting stock, site preparation 9681
- *Pinus*
  - foliage, morphology, chemistry, site class assessment 3745
  - increment, volume, plant nutrition 6182
  - site preparation, stand establishment, increment 9504
  - soil chemistry, weathering, soil organic matter 292
- *Pinus contorta*
  - bark, thickness, variation, provenance 990
  - forest litter, decomposition, mathematical models 9701
  - progeny testing, genetic variation 1431
  - provenance trials 3373
    - site class assessment 3367
- *Pinus sylvestris*
  - afforestation
    - peatlands, forestry practices, climate 6112
    - spacing, tree breeding 9974
  - air pollution, deposition, leaf conductance 7991
  - clear felling, soil chemistry, nitrogen, leaching 7044
  - dendrochronology 5916
  - direct sowing, seedling emergence, soil water, site preparation 6111
  - fertilizers
    - clear felling, soil chemistry, denitrification 1095
    - nitrogen cycle, isotope fractionation, methodology 2490
  - foliage
    - chemistry, air pollution, indicator plants 1152
    - shedding, plant nutrition, nitrogen 4528
    - shoots, light 2035
  - forest litter
    - decomposition
      - mathematical models 9701
      - site factors, climate 4495
  - forest nurseries, frost protection 5120

Sweden *cont.*

- *Pinus sylvestris cont.*
  - forest plantations, beating up, increment, plant morphology 9529
  - frost resistance, altitude, latitude 5233
  - girdling, wood properties, resinous wood 3682
  - ground vegetation, allelopathy, natural regeneration, seed germination 9913
  - increment, urea, thinning 3487
  - leaf area index, measurement, equipment 1610
  - liming, roots, soil chemistry 9460
  - natural regeneration
    - advance growth 3436
      - mortality 3435
    - artificial regeneration, wood properties, increment 7120
  - natural thinning, stand characteristics 3460
  - nitrogen fertilizers, nitrogen cycle 4295
  - palaeoecology 3066
  - peatlands, increment, plant nutrition 9934
  - pollen
    - gene flow 5509
    - genetic variation 6588
  - pollination, seed orchards 3134
  - provenance trials
    - experimental design, plant competition, increment 9415
    - mortality 3368
  - remote sensing, reflectance, variation 7845
  - seed maturation
    - seed collection, radiography 3382
    - seed treatment 6037
  - seed orchards
    - pollination
      - management 9875
      - tree breeding 5500
  - seedling growth, weeds, allelopathy, plant competition 1759
  - shelterwood system, microclimate, radiation 3428
  - site class assessment, soil chemistry, topography 2708
  - site preparation, slash, cycling 3445
  - stand structure, natural regeneration 7260
  - thinning
    - fertilizers, wind damage, snow damage 3560
    - stand characteristics 9520
  - transpiration, climatic change, simulation 4516
- *Populus interamericana,* agroforestry, soil properties, nitrogen cycle 10115
- *Populus tremula*
  - epiphytes, bark, chemistry, soil chemistry 8168
  - hybrids, species trials, genetic variation 9416
  - roots, chemistry, seasonal variation 9826
- *Populus tremuloides,* hybrids, species trials, genetic variation 9416
- private forestry, forest economics 5215
- *Quercus robur,* dendrochronology, air pollution 6759
- remote sensing
  - forest inventories, increment 7008
  - image interpretation, soil types, leptosols, stand characteristics 5205
  - land use, plant succession 8404
  - thinning, reflectance 4443
- road construction, techniques 9613
- rodents, damage, broadleaves, provenance trials 4055
- *Salix*
  - biomass distribution, estimation 6978
  - *Cryptodiaporthe salicella* 5643
  - geographical distribution 2136
  - *Glomerella miyabeana* 5643
- *Salix viminalis*
  - biomass, growth models, nitrogen 4210

Sweden *cont.*
  Salix viminalis cont.
    evaporation, diurnal variation, seasonal variation 4080
    plant nutrition, foliage, nutrients, analysis 318
    plant water relations, seasonal variation, evapotranspiration, simulation 3335
    sap flow, plant water relations 8811-8812
    water use efficiency, seasonal variation, biomass production 3604
  scarifiers 188
  shelterwood system, natural regeneration, microclimate, monitoring, equipment 9333
  silviculture, nature conservation 6919
  site preparation
    scarifiers, work study 9551
    soil physics, temperature 9506
  soil organic matter, sorption, halogens 8777
  squirrels, *Sciurus vulgaris,* coniferous forests, fragmentation, ecology 2390
  stand structure, diameter, logging 5154
  street trees, roots, damage, sewerage, systems 5911
  subalpine forests, forest management, planning, simulation 9605
  thinning, mechanization 5159
  Vaccinium myrtillus, forest litter, measurement, decomposition, nutrients 9702
  vegetation types
    botanical composition, assessment 6539
    history, pollen analysis 509
  wildlife
    birds, cavities in trees, clear felling 6690
    boreal forests, forest borders, clear felling 5810
Swietenia, genetic variation, geographical distribution, genetic markers 5528
Swietenia macrophylla
  afforestation
    site preparation, fertilizers, Indonesia 7781
    stand establishment, biomass distribution, Costa Rica, root systems 9530
  forest plantations
    agroforestry, sheep, Cuba 1556
    weeds, damage, Indonesia 1755
  insect pests
    Hypsipyla grandella, Cuba, damage 1483
    Hypsipyla robusta, India, biological control 672
  Leucaena leucocephala
    mixtures
      Indonesia
        growth 1788
        spacing 1788
  logging, forest economics, deforestation, Amazonia 7568
  rain forests, Mexico, wood anatomy 1211
  reclamation, degraded forests, development, Indonesia 7560
  secondary forests, selective felling, planning, sustainability, Venezuela 5122
  seedling growth, green manures, Indonesia 1711
  species trials
    firebreaks, Indonesia 2000
    reclamation, mined land, Cuba 1540
  ultraviolet radiation, plant physiology, Panama 6257
Swietenia macrophylla* × *Swietenia mahagoni, volume tables, Puerto Rico, forest plantations 2713
Swietenia mahagoni
  agroforestry, Haiti 1563
  forest plantations, Indonesia 930
  insect pests
    Hypsipyla grandella, USA, chemical control 8351
    Macalla thyrsisalis, USA, chemical control 8351
Swietenia mahagoni *cont.*
  insect pests *cont.*
    Phyllocnistis meliacella, USA, chemical control 8351
  pollination, insects, USA, Thysanoptera 9129
  reclamation, eroded soils, community forestry, choice of species, Indonesia 3237
Swine (*see* Wild pigs)
Switzerland
  Abies alba
    forest decline, dendrochronology, air pollution, climate 2091
    genetic variation, palaeoecology 7343
  afforestation, agricultural land, mountain areas, landscape, perception 8451
  biodiversity, forestry practices, conferences 6808
  Castanea sativa, reviews 184
  conifers, treelines, dendrochronology, dieback 6762
  deforestation, environmental impact 719
  Fagus sylvatica
    air pollution
      chlorine, indicator plants 2495
      foliage 336
      municipal refuse disposal, chloride 6341
    crown, increment, forest decline, simulation 8944
    increment, site factors 6967
    remote sensing, radar, temperature 1862
    wood anatomy, vessels, climate 8894
  forest decline, forest inventories 4721
  forest fires, fire danger, fire weather 370
  forest health
    assessment, techniques, variation 8118
    research 1302
  forest influences, carbon dioxide enrichment 355
  forest inventories
    computer techniques 6835
    forest health, sampling 9624
    increment 6220
    remote sensing, forest health 4438
    sampling 242
      cost analysis 6219
      growth, yield forecasting 6211
      statistical analysis 7836
  forest management, computer techniques, information systems 34
  forest policy, legislation 42
  forest roads
    development policy, books 4161
    environmental impact 235
  forest trees
    injuries 2093
    ozone, seedlings 5311
  forestry, nature conservation, forest policy 7589
  forests
    mapping, geographical information systems 2756
    nature conservation, monitoring, experimental plots 10122
    utilization, history, grazing 6842
  fungal diseases
    Castanea sativa 184
      coppice, fungi 5617
    Cryphonectria parasitica, Castanea sativa, aerial photography 7854
    decay fungi, *Picea abies* 6628
    Pyrenochaeta ligni-putridi, Picea abies 5631
    Quercus robur, mixed infections 9092
  genetic diversity, silvicultural systems, selection system 7334
  insect pests
    Castanea sativa 184
    Cinara pilicornis, Picea abies, air pollution, ozone 5693
    Picea abies, cones 8327
  landscape, history, geographical information systems, analysis 2431
  legislation, environmental impact 50
Switzerland *cont.*
  mixed forests
    botanical composition, climate, simulation 3957
    composition, mapping, simulation 246
  mixtures, silviculture 178
  mountain forests, silviculture 4318
  multiple use, valuation 264
  organizations 38
  peatlands, nature conservation, books 6781
  Picea abies
    decay, roots, defoliation 469
    foliage
      chemistry
        alkali metals 5394
        rare earth elements 2982
      waxes, environmental effects 5220
    plant nutrition, foliage, age 7958
    protection forests, forest decline, fertilizers 7753
    subalpine forests, natural regeneration, mosses 6555
    throughfall, air pollution, precipitation, trace elements 4552
  Pinus, population genetics, isoenzymes 5489
  Pinus cembra, stem form, forking and multiple stems 6394
  Pinus sylvestris, stand development, plant competition, growth, variation 3884
  plant succession
    climatic change, simulation 8171
    old fields, mountain areas, landscape, perception 8451
  protection forests, natural disasters, risk 10088
  Pseudotsuga menziesii, yield tables, estimation 4412
  research
    selection system 38
    virgin forests 38
  site class assessment, selection forests, site types 6967
  Sorbus, hybrids, population genetics, plant morphology 6596
  Sorbus torminalis, silvicultural characters 3466
  vegetation, history, charcoal, soil formation 4760
  vegetation types, climatic change, simulation 7267
Symbiosis
  Bradyrhizobium, Faidherbia albida, Senegal, theses 5667
  Bradyrhizobium japonicum, multipurpose trees, seedling growth, nitrogen fixation 3151
  Cecropia tessmanii, Formicidae, plant morphology, plant nutrition 3716
  Cycas revoluta, roots 4842
  Frankia, Casuarina, nitrogen fixation, trials 2232
  Macrozamia communis, roots, morphology 3729
  Rhizobium
    Leucaena diversifolia, nitrogen fixation, seedlings, isotope dilution 8263
    multipurpose trees, seedling growth, nitrogen fixation 3151
    Sesbania sesban
      nitrogen fixation, seedlings, isotope dilution 8263
      seed inoculation 6880
        aerial sowing 2242
Symphonia globulifera, gas exchange, light, Guadeloupe, adaptation 4682
Synanthedon scitula, insect pests, *Cornus florida,* USA, biological control 2374
Synecology
  acid deposition, Germany, books 1593
  Alnus glutinosa
    plant succession, Sweden 1397
    swamps, peatlands, Latvia 1381
  Arecaceae, fruiting, Brazil 3060
  avalanches, snow, USA 2911
  Betula, botanical composition, geographical distribution, Russia 1353
  Betula obscura, distribution, taxonomy, Poland 1337

Synecology *cont.*

- botanical composition
  - deciduous forests, drought, increment, USA 3593
  - *Fagus sylvatica,* Slovakia 7273
  - maps, geographical information systems, basal area, Canada 4451
  - mountain forests
    - Ethiopia 3897
    - stand structure, Ecuador 3071
  - rain forests
    - Melastomataceae, soil types, Peru 3940
    - stand structure
      - Australia 3055
      - Ecuador 3071
      - New Zealand 3076
  - riparian forests, Brazil 6538
  - sclerophyllous scrub
    - site factors
      - Australia 3077
      - South Africa 3077
  - secondary forests, stand structure, Ecuador 3072
  - site factors, mountain forests, statistical analysis, Mexico 3895
- broadleaved evergreen forests
  - mountain forests, Sri Lanka 1374
  - plant competition, increment, South Africa 223
  - secondary forests, stand characteristics, South Africa 516
- broadleaves
  - dendrochronology, increment, USA 5914
  - phenology, Italy 9957
- brushwood, understorey, India 522
- caatinga, Colombia 3921
- canopy gaps
  - *Anodopetalum biglandulosum,* habit, Australia 2012
  - deciduous forests, roots, distribution, USA 3109
  - forest trees
    - bottomland forests, floods, New Zealand 3964
    - natural regeneration, New Zealand 1413
  - mixed forests, stand characteristics, USA 4806
  - *Pinus contorta,* mycorrhizas, USA 4013
- *Carpinus betulus,* degraded forests, national parks, Poland 2140
- cerrado, phenology, Brazil 8995
- climate
  - simulation, USA, diurnal variation 1341
  - USA, conferences 2466
- climbers, habit, forest trees, South Africa 3946
- cloud forests
  - altitude, land use, Nepal 1371
  - stand structure, layer structure, Mexico 7278
- coastal plant communities, biodiversity, Tanzania 1369
- coniferous forests
  - climate, simulation, USA 1340
  - forest decline, USA, stress factors 2121
  - land use, USA, history 2408
  - *Pinus sylvestris,* Germany 7282
  - remote sensing
    - simulation, USA 1338, 1347
    - USA, soil properties 1382
- *Dacrycarpus dacrydioides,* epiphytes, climbers, New Zealand 3088
- deciduous forests
  - altitude, India 1365
  - geographical distribution, Saudi Arabia 1360
  - land use, USA, history 2408
  - remote sensing, India 9638
  - soil properties, climate, Venezuela 1370
- dunes, Portugal 7288
- ecotones
  - *Bombax malabaricum,* natural regeneration, rain forests, Australia 3935

Synecology *cont.*

- ecotones *cont.*
  - broadleaved evergreen forests, carbon cycle, soil organic matter, India 1361
  - broadleaves, savannas, soil chemistry, Australia 3087
  - savannas, carbon cycle, soil organic matter, India 1361
  - simulation, North America 3061
  - *Sterculia quadrifida,* natural regeneration, rain forests, Australia 3935
- *Eucalyptus,* coppice, understorey, India 522
- *Fagus,* deciduous forests, canopy, increment 3906
- *Fagus sylvatica*
  - forests, Spain, statistical analysis 2142
  - plant succession, Germany 9953
  - site class assessment, Greece 1355
- fens
  - foliage
    - morphology
      - New Zealand 3898
      - UK 3898
- forest borders
  - plant succession, USA 3098
  - USA 3874
- forest fragmentation, endangered species, Australia 10128
- forest trees, climate, geographical distribution, New Zealand 7266
- forests
  - classification, Canada, disturbed land 1357
  - climate, Sri Lanka 1373
  - conferences 5001
  - geology, India 1354
  - national parks, maps, Poland 2139
  - stand structure, natural regeneration, India 2167
- *Fraxinus excelsior,* plant succession, Sweden 1397
- ground vegetation, forest borders, Europe 9012
- layer structure (*see also* Ground vegetation)
  - coniferous forests, statistical analysis, Norway 3941
  - rain forests, New Zealand 6560
  - woodlands, forest management, UK 10149
- man, riparian forests, riverside plantations, Poland 1175
- mangrove forests
  - India 523
  - remote sensing, India 6996
- mangroves
  - Bermuda, sea water 525
  - conferences 16
  - forest management 5450
- maquis, Spain 3908
- marshes, Croatia 4775
- mixed forests
  - altitude, India 1365
  - canopy gaps, plant succession, USA 3101
  - forest decline, USA, stress factors 2121
- mountain forests
  - altitude, Slovenia 5444
  - Argentina 2148
  - conferences 3307
  - disturbed land, plant succession, Papua New Guinea 3104
  - Greece 3902
  - Guatemala 3079
  - Korea Democratic People's Republic 3919
  - matorral, desertification, Morocco 3939
  - Mexico 3079
  - secondary forests, Costa Rica 3901
- *Nothofagus pumilio,* silviculture, mensuration, Chile, reviews 955
- *Picea abies*
  - mixed forests, plant succession, Poland 2164
  - plantations, Germany 9004
- *Pinus halepensis,* fire effects, Israel 1199

Synecology *cont.*

- *Pinus monophylla,* plant water relations, USA 8808
- *Pinus mugo*
  - biomass, Slovakia 7302
  - forests, Slovakia 521
- *Pinus roxburghii,* forests, deforestation, ground vegetation 535
- *Pinus sibirica,* population genetics, Russia 4755
- *Pinus sylvestris*
  - ground vegetation, UK, lichens 1359
  - mixed forests
    - natural regeneration, Poland 8179
    - plant succession, Poland 2164
- plant communities, *Fagus sylvatica,* statistical analysis, Germany 3327
- Podocarpaceae, rain forests, light, New Zealand 271
- population dynamics, forest trees, savannas, Côte d'Ivoire, simulation 2511
- population ecology, *Phyllocladus asplenifolius,* natural regeneration, stand structure, Australia 3953
- *Quercus*
  - deciduous forests, climate, Spain 3903
  - forests, Poland 1380
- *Quercus agrifolia,* understorey, USA 7305
- *Quercus coccifera,* vegetation types, Portugal 7289
- *Quercus faginea,* forests, Spain 8158
- *Quercus leucotrichophora,* forests, deforestation, ground vegetation 535
- *Quercus petraea,* vegetation types, Croatia, mountain forests 4774
- *Quercus robur,* degraded forests, national parks, Poland 2140
- rain forests
  - agroforestry, cattle, Mexico 6736
  - altitude, USA 3918
  - China 9911
  - forest fragmentation, nature conservation, Australia 10129
  - soil properties, Costa Rica 2154
- riparian forests
  - Europe 3934
  - USA 3916
- roots, vegetation, carbon dioxide enrichment, books, conferences 6798
- Salicaceae, Russia 4780
- *Salix helvetica,* vegetation types, Slovakia 520
- *Salix silesiaca,* Slovakia 6550
- savannas
  - land use, Zimbabwe 6549
  - trees, population dynamics 3904
- sclerophyllous scrub, conferences 3307
- scrub
  - altitude, India 1365
  - geology, India 1354
- secondary forests
  - altitude, India 1365
  - soil properties, Costa Rica 2154
- *Shorea robusta*
  - climax communities, understorey, India 522
  - degraded forests, stand structure, India 213
  - ground vegetation, biomass production, India 9933
  - vegetation, degradation, India 1366
- site factors
  - *Eucalyptus,* simulation, Australia 3329
  - *Pinus sylvestris,* coniferous forests, clear felling, Estonia 1363
  - variation, *Acacia,* Arid Regions, Kenya 8153
  - wetlands, Canada 8159
- species diversity
  - *Brosimum alicastrum,* recruitment, seed predation, Mexico 1406
  - *Cistus ladanifer,* scrub, Spain 9922
  - conifers, Sweden, simulation 5965
  - ecotones
    - *Acacia,* woodlands, Kenya 5443
    - rain forests, Côte d'Ivoire 9923
    - savannas, Côte d'Ivoire 9923
  - flora, conservation, Spain 8138

- **Synecology** *cont.*
  - species diversity *cont.*
    - forest fragmentation
      - Estonia, models 8154
      - Finland, models 8154
      - Lithuania, models 8154
    - forests
      - forest plantations, multiple land use, Spain 8407
      - national parks, Indonesia 2143
      - soil pH, Poland 7284
    - nature conservation, valleys, India 3084
    - *Pinus sylvestris,* ground vegetation, Spain 3942
    - plant succession, secondary forests, Estonia 3075
    - rain forests
      - Australia 7294
      - forest fragmentation, China 8984
      - forest litter, measurement, Sabah 2823
      - natural regeneration, Tropics, reviews 7326
      - soil fertility, Peninsular Malaysia 1379
    - riparian forests
      - Latin America, fragmentation 6547
      - stand structure, natural regeneration, Brazil 8177
    - USA, theory 3882
    - vegetation, sampling, USA 9349
  - synecology, forest decline, air pollution, ground vegetation, Czechoslovakia 339
  - *Tectona grandis*
    - forests, medicinal plants, Indonesia 1808
    - ground vegetation, biomass production, India 9933
  - topography, mixed forests, India 7269
  - trails, damage, Canada 10135
  - tropical forests
    - botanical composition, Sri Lanka 1368
    - flooding, Brazil 1367
    - ground vegetation, biomass production, India 9933
  - vegetation, maps, Nepal 1371
  - vegetation types
    - altitude, USA 6526
    - Australia 3074
    - classification, North America 3082
    - Croatia 4778
    - degraded forests, Bolivia 9932
    - forest fires, altitude, USA 3053
    - forest management, Mexico 4773
    - savannas, South Africa, books 4997
    - soil properties, deserts, Saudi Arabia 8162
    - South Africa 5451, 8160
  - woodlands
    - land use, Zimbabwe 6549
    - national parks, maps, Poland 1377
- ***Syringa***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- ***Syringa reticulata***
  - phenology
    - roots, transplanting 5908
    - USA 6390
  - transplanting, USA, survival, seasonal variation 5907
- ***Syringa vulgaris***
  - bacterial diseases, *Pseudomonas syringae,* Italy 613
  - fungal diseases, *Microsphaera syringae,* USA, control 4876
  - shoot cuttings, landscape, Canada 6041
  - tissue culture, micropropagation, culture media, growing media, Poland 6882
- **Systems analysis,** forest management, conferences 2472
- ***Syzygium***
  - natural regeneration, protection, forest plantations, India 4811
  - taxonomy, Thailand 8972
- ***Syzygium corymbosa,*** fisheries, Sri Lanka 9232
- ***Syzygium cumini***
  - energy value, seasonal variation, India 2541
  - fisheries, Sri Lanka 9232
  - foliage
    - plant water relations, biomass production, India 8821
    - sugars, photosynthesis 6485
  - shoot cuttings, India 1690
- ***Tabebuia impetiginosa,*** buds, phenology, plant water relations, Costa Rica 2929
- ***Tabebuia ochracea***
  - buds, phenology, plant water relations, Costa Rica 2929
  - insect pests, Brazil, damage, foliage 3176
  - plant water relations, drought, phenology, Costa Rica 2838
- ***Tabebuia rigida,*** cloud forests, precipitation, deposition, Puerto Rico 2789
- ***Tabebuia rosea***
  - grafting, Colombia 879
  - shoot cuttings, Colombia 879
- ***Tabebuia serratifolia,*** species trials, reclamation, mined land, Venezuela 6711
- ***Tabernaemontana subglobosa,*** foliage, indole alkaloids 9821
- ***Tachigali myrmecophila,*** insects, *Pseudomyrmex concolor,* mutualism, Brazil 2296
- ***Tachigali versicolor,*** seed dispersal, seedlings, recruitment, Panama 483
- ***Taeniatherum caput-medusa,*** rangelands, weed control, physical control, USA 5147
- ***Taeniothrips inconsequens***
  - insect pests
    - *Acer saccharum*
      - USA
        - control 2254, 4033
        - damage 4034
        - plant physiology 1477
- **Taiwan**
  - *Acacia auriculiformis,* provenance trials, plant morphology, growth 5050
  - bamboos, *Yushania niitakayamensis,* population genetics, random amplified polymorphic DNA 5547
  - *Chamaecyparis,* isoenzymes, population genetics 4835
  - *Cryptomeria japonica,* heartwood, sapwood, formation 6395
  - flora 5435
  - forest management, efficiency, analysis 3492
  - insect pests, *Lepidomyctides nagaii, Bambusa multiplex* 7465
  - mycorrhizas, forest trees 3158
  - provenance trials, *Acacia auriculiformis* 6867
  - *Schima superba,* air pollution, sulfur dioxide, seedling growth, physiology 7997
  - viral diseases, bamboo mosaic potexvirus, *Bambusa oldhamii* 5671
- ***Taiwania flousiana,*** species trials, exotics, arboreta, New Zealand 2545
- **Tajikistan,** *Populus pruinosa,* soil salinity, foliage, nutrients 1940
- ***Talauma boliviana,*** taxonomy, Bolivia 4739
- ***Tamarindus indica***
  - insect pests
    - *Caryedon serratus*
      - chemical control 5781
      - India, biology 2341
    - India, biological control 5806
  - medicinal plants, degraded forests, Sri Lanka 5851
  - seed collection, seed treatment, seed germination, India 1680
  - seed germination, seedling growth, soil chemistry, carbon, Zambia 5239
  - seed weight, nutrients, seedling growth 9438
  - species trials, reclamation, mined land, Cuba 1540
- ***Tamarix,*** vegetation, reclamation, sodic soils, India 712
- ***Tamarix aphylla***
  - salt glands, Australia 2071
  - shoot cuttings, India 3400
- ***Tamarix aphylla*** *cont.*
  - species trials, saline soils, reclamation, Pakistan 6014
- ***Tamarix articulata,*** shoot cuttings, shelterbelts, saline soils, Mexico 7556
- ***Tamarix chinensis***
  - plant colonization, streams, salinity, USA 6565
  - riparian forests
    - birds, species diversity, USA 8362
    - plant colonization, plant water relations, USA 9018
  - water uptake, USA, riparian forests 1108
- ***Tamarix mannifera,*** vegetation types, synecology, soil properties, deserts, Saudi Arabia 8162
- ***Tamarix nilotica***
  - mites
    - *Aceria dioicae,* Egypt, galls 9177
    - *Dicruvasates tamaricis,* Egypt, galls 9177
- ***Tamarix parviflora,*** shoot cuttings, shelterbelts, saline soils, Mexico 7556
- ***Tamarix plumosa,*** shoot cuttings, shelterbelts, saline soils, Mexico 7556
- ***Tamiasciurus hudsonicus***
  - squirrels
    - coniferous forests, USA, ecology 3207
    - *Pinus contorta,* Canada, prevention 1511
- ***Tanaostigmodes tambotis***
  - insect pests
    - *Spirostachys africana*
      - South Africa
        - biology 7492
        - new species 7492
- **Tanzania**
  - *Acacia mearnsii,* farm forestry, economics 3251
  - *Acacia tortilis,* savanna woodlands, shelterbelts 4946
  - agroforestry 6732
  - broadleaved evergreen forests, exotics, invasion, nature conservation 1573
  - broadleaves, medicinal plants 5166
  - *Cassia abbreviata,* medicinal plants, plant composition 9565
  - coastal plant communities, synecology, biodiversity 1369
  - community forestry 10118
    - development projects 5890
      - extension 1571
    - forest management, development projects 1570
  - *Cupressus benthamii,* provenance trials 5058
  - *Cupressus lusitanica,* provenance trials 5058
  - elephants, *Loxodonta africana, Adansonia digitata,* browsing damage, simulation 4048
  - *Faidherbia albida*
    - agroforestry 7576
      - economics 3261
  - forest trees
    - genetic resources, conservation, techniques 8236
    - savanna woodlands
      - biomass, equations 6974
      - volume, equations 6974
  - insect pests, *Cinara cupressi, Cupressus lusitanica,* clones, resistance 1479
  - land use, deforestation, erosion 3249
  - *Leucaena leucocephala,* agroforestry, economics 3261
  - medicinal plants 2676
  - non-wood forest products, food supply, villages 1796
  - *Pterocarpus angolensis*
    - seedling growth
      - forest nurseries
        - artificial regeneration 9479
        - fertilizers 9479
        - natural regeneration 9479
        - roots, pruning 9479
  - savanna woodlands
    - degraded forests, grazing 3905
    - natural regeneration, farmland, surveys 3114

Tanzania *cont.*
  wildlife, *Aepyceros melampus, Acacia tortilis,* natural regeneration 4065
  woody plants, nomenclature, uses, ethnobotany, reserved forests 964
Taper, stem (*see* Form factors; Stem form, taper)
Taphrina betulina
  fungal diseases
    Betula pubescens
      increment, witches' brooms, UK 5663
      UK 5662
Tapinanthus dodoneifolius, mistletoes, *Vitellaria paradoxa,* Burkina Faso 7414-7415
Tapinanthus globiferus, mistletoes, *Vitellaria paradoxa,* Burkina Faso 7414-7415
Tapinanthus ophiodes, mistletoes, *Vitellaria paradoxa,* Burkina Faso 7414-7415
Tapinanthus vittatus, mistletoes, *Diplorhynchus condylocarpon,* photosynthesis, Zimbabwe 4026
Tapirira, wood anatomy, taxonomy 8057
Tapirira chimalapana, taxonomy, Mexico 8131
Tapirira marchandii, photosynthesis, soil fertility, Guyana 7193
Tapura arachnoidea, taxonomy, Gabon, new species 9890
Tapura latifolia, wind damage, Guadeloupe, resistance 1063
Tarrietia (*see Heritiera)*
Tasmannia glaucifolia, flowers, development 476
Tasmannia insipida, flowers, development 476
Tasmannia stipitata, flowers, development 476
Taungya (*see also* Agroforestry; Shifting cultivation)
  Cunninghamia lanceolata, indigenous knowledge, China 7572
  development projects, Indonesia 1553
  Pinus merkusii, increment, Indonesia 2414
  socioeconomics, Indonesia 6728
  Tectona grandis, Myanmar, history, sociology 9266
Tax incentives, rotations, carbon, storage, Canada 8546
Taxes
  forest economics, France, inheritance tax 9645
  private forestry
    Canada 1639
    USA 2531
  valuation, legislation, Germany 9657
Taxodiaceae, chloroplast genetics, taxonomy 500
Taxodioxylon gypsaceum, insect pests, *Xylocopa,* old and fossil wood, Italy, damage 1492
Taxodium distichum
  bark, chemistry, proteins 3786
  flooding
    hypoxia
      photosynthesis, plant composition 3606
      roots
        gas exchange 1120
        increment 1120
    roots, shoots, biomass production 312
  forest nurseries, container grown plants, roots 4137
  increment, soil water regimes, USA, road construction 7063
  plant morphology, habit, taxonomy, Poland 1206
  secondary forests, stand characteristics, USA, growth 7321
  seedlings
    salt tolerance
      flooding, USA, genetic variation 5402
      flooding tolerance 6293
  shade trees, USA, evaluation 8457
  shoot cuttings, rooting, USA 3397
  stand structure, stability, USA 550
Taxodium distichum *cont.*
  swamps, forest litter, decomposition, USA 3579
  wood chemistry, proteins 3786
Taxomyia taxi, insect pests, *Taxus baccata,* UK, population dynamics, parasitoids 2368
Taxonomy (*see also* Chemotaxonomy)
  Abies alba, molecular genetics 8227
  Abies nebrodensis, molecular genetics 8227
  Acacia
    Australia 5431
    Latin America 4745
    Senegal 9981
    stomata, genetic variation 4648
  Adansonia 8970
  Adenanthera mantaroa, Madagascar, new species 9889
  Alangium
    Sabah 7229
    Sarawak 7229
  Anacardiaceae, seeds 3720
  Andira, chloroplast genetics, phylogeny 6600
  Apocynaceae, fruits, anatomy, identification 7157
  Apodytes, bark, anatomy 399
  Asteraceae, Peru 7247
  bamboos
    Bambusa arundinacea, nomenclature, India 3854
    Hickelia 8966
    Himalayacalamus hookerianus
      India, utilization 8453
      ornamental woody plants
        New Zealand 8453
        UK 8453
    Merostachys, Brazil 6519
  Banksia integrifolia, Australia 2117
  Beilschmiedia angustielliptica, Mexico 6517
  Betula obscura, distribution, synecology, Poland 1337
  biodiversity, nature conservation, books, conferences 5921
  Brachynema axillare, South America 9902
  broadleaves, plant morphology, habit, Poland 1207
  Buchenavia costaricensis, Costa Rica 6520
  Burseraceae
    Sabah 7226
    Sarawak 7226
  Caesalpinia
    flowers, secretion, plant morphology, ecology 8901
    foliage, glands 2967
  Caesalpinia coccinea, Mexico, new species 8961
  Caesalpinieae, flowers, development 8976
  Caesalpinioideae, foliage, anatomy 8067
  Calamus, canes and rattans, foliage, epidermis, plant anatomy 8135
  Carpinus turczaninowii, embryology 2054
  Cassinopsis, bark, anatomy 399
  Casuarina, books 2448
  Conceveiba parvifolia, Latin America 9903
  conifers, plant morphology, habit, Poland 1206
  Crataegus monogyna, foliage, morphology 2960
  Crudia balachandrae, India, new species 8968
  Cupressaceae, chloroplast genetics 500
  Cupressus bakeri
    cones, genetic variation, USA 2198
    foliage, genetic variation, USA 2198
  Cycas, India 5432
  cytotaxonomy
    Larix, chromosomes 8224
    Pseudolarix amabilis 7233
  Danais
    climbers
      Comoros 9892
      Madagascar 9892
  Dicellostyles zizyphifolia, Thailand 8973
Taxonomy *cont.*
  Dichapetalaceae, new species 8962
  Dichapetalum, Costa Rica, new species 8962
  Diospyros xishuangbannaensis, China 9905
  Duguetia, phylogeny 6521
  Duranta, Australia 8129
  Durio macrantha, Indonesia 8980
  Enkianthus 3044
  Ericaceae 3044
  Eucalyptus
    Australia 8130
    foliage, morphology 494
    Indonesia, new species 5433
    nomenclature, Australia 5434
    plant morphology, Australia 496
  Excoecaria, flora, South East Asia 7240
  Fabaceae
    Caesalpinioideae, fruits, seeds, phylogeny 8977
    flora, Mexico, uses 1329
    Mimosoideae, fruits, seeds, phylogeny 8977
    Papilionoideae, embryology, evolution 8903
    seeds, chemistry, galactomannans 7218
    Sophoreae, pollen, morphology 8902
    wood anatomy 8905
  Fernandoa, Africa 8965
  Ficus, genetic resources, Indonesia 8981
  flora, North America 5929
  forest trees
    identification 2040
    plant morphology, habit, Poland 1322, 2114-2115
  Froesia diffusa, Amazonia 491
  Galipea dasysperma, Central America 3850
  Grewia, China 2119
  Hibiscadelphus woodii, USA 7237
  identification
    Castanea, genetic variation, isoenzymes 2217
    Dalbergia, Indonesia 2113
    Parashorea malaanonan, bark, anatomy, Philippines 413
    Pterocarpus indicus, Indonesia 2113
    Shorea
      bark, anatomy, Philippines 413
      wood anatomy, Philippines 412
  Illicium, Malaysia 8133
  Jasminum, South East Asia 7232
  Juglans, genetic diversity, molecular genetics 2223
  keys
    Eucalyptus, China 7619
    rain forests, forest trees, computer techniques, Australia 6769
  Kokoona
    Sabah 7227
    Sarawak 7227
  Kunzea ericoides, New Zealand 499
  Kunzea sinclairii, New Zealand 499
  Kunzea sinclairii × *Leptospermum scoparium,* New Zealand 499
  Larix, chloroplast genetics 6585
  Larix sibirica, chromosomes, isoenzymes 4746
  Leucaena, Mexico 8134
  Lythraceae 3995
  Maesobotrya, nomenclature, Zaire 5426
  Magnoliaceae 8978
  Malpighiaceae, Latin America 9906
  mangroves, Rhizophoraceae, epidermis, morphology, Nigeria 3724
  Melicope, Borneo 7231
  Melicytus flexuosus, New Zealand, new species 3847
  Metteniusa cogolloi, Colombia 492
  Microtropis
    Sabah 7227
    Sarawak 7227
  Millettia, Madagascar 7236
  Myrtaceae, Thailand 8972
  Naucleopsis, nomenclature, Brazil 9895
  new species
    Apodytes, botany, South Africa 3849

- **Taxonomy** *cont.*
  - new species *cont.*
    - bamboos, *Sinarundinaria nagalandiana,* plant morphology, India 7219
    - *Encephalartos equatorialis,* Uganda 9900
    - *Eucalyptus,* Australia 3859
    - *Eucalyptus ammophila,* Australia 3861
    - *Eucalyptus clandestina,* Australia 3860
  - new taxa
    - *Acacia,* Australia 3857-3858
    - *Alnus incana,* Finland 498
    - *Betula pendula,* Finland 498
    - *Eucalyptus,* Australia 3856
    - *Jeffersonioxylon gordonense,* wood anatomy, Antarctica 8072
  - *Ouratea,* Venezuela 7238
  - *Ouratea scottii,* South America 4741
  - *Parapiptadenia ilheusana,* Brazil, new species 8960
  - *Paulownia taiwaniana,* molecular genetics 5531
  - *Peltogyne chrysopis,* Brazil 4740
  - *Persoonia,* Australia 7224
  - Persooniinae, Australia 7225
  - *Petrea,* Latin America 3046
  - *Phyllostachys,* genetic variation 5530
  - *Picea*
    - genetic variation, hybrids 7361
    - plant morphology
      - plant composition
        - Mexico 501
        - USA 501
    - seeds, analysis, proteins 1320
  - Picramniaceae 7220
  - *Pinus* 7241
    - chloroplast genetics, hybrids 9048
  - *Pittosporum*
    - Borneo 7230
    - fruits, New Caledonia, new species 9888
    - Sabah 7230
  - Podocarpaceae, foliage, morphology, palaeobotany, Australia 497
  - *Protorhus namaquensis,* seed anatomy, South Africa 3848
  - *Prunus,* geographical distribution 1351
  - *Pyrus,* nomenclature, geographical distribution, bibliographies 7221
  - *Quercus*
    - hybrids, foliage, trichomes 1215
    - USA 3851
  - *Quercus robur,* Slovenia 8974
  - *Quercus rotundifolia,* fruits, morphology, Spain 1321
  - *Quercus rubramenta,* botany, Mexico 1323
  - *Ravenea*
    - Comoros 8963
    - Madagascar 8963
  - *Rhoiptelea chiliantha,* embryology 7166
  - root nodules
    - *Bradyrhizobium,* Fabaceae, Brazil 9070
    - *Rhizobium,* Fabaceae, Brazil 9070
  - *Rosa,* geographical distribution, Greece 1352
  - *Rosselia bracteata,* Papua New Guinea, new genus 8964
  - Rubiaceae
    - conferences 8484
    - Costa Rica 7239
  - *Rustia,* Latin America 7235
  - Rutaceae
    - Africa 3045
    - Persian Gulf States 3045
  - *Salix,* North America 8136
  - *Sarcolaena isaloensis,* Madagascar 493
  - Simaroubaceae 7220
  - *Siparuna,* South America 6518
  - *Siphonodon celastrineus,* India 2116
  - *Stephanopodium magnifolium,* Brazil, new species 8962
  - *Sterigmapetalum,* South America 9901
  - *Stryphnodendron,* pollen, morphology 393
  - Styracaceae, pollen, morphology 392
  - *Talauma boliviana,* Bolivia 4739
- **Taxonomy** *cont.*
  - *Tapirira,* wood anatomy 8057
  - *Tapirira chimalapana,* Mexico 8131
  - *Tapura arachnoidea,* Gabon, new species 9890
  - Taxodiaceae, chloroplast genetics 500
  - *Tephrosia,* stomata, India 5428
  - *Tetracentron sinense,* embryology 2053
  - *Trichilia luciae,* Brazil 9894
  - *Turpinia,* Borneo 7228
  - *Ulmus*
    - genetic variation, isoenzymes, France 5429
    - molecular genetics, phylogeny 5541
  - *Vaughania,* Madagascar 9893
  - *Vitellaria paradoxa* 9897
  - *Vitex,* South Africa, new taxa 502
  - *Votomita cupuliformis,* Panama 9904
  - *Weinmannia ilutepuiensis,* Venezuela 7234
  - woody plants, stomata, density, habitats 8061
  - *Zygia*
    - Central America, new species 8967
    - South America, new species 8967
- ***Taxus***
  - bark, chemistry, alkaloids, diterpenoids 8080
  - cell suspensions, metabolites, isolation 9331
  - forest nurseries, medicinal plants, USA, prunings disposal 4308
  - fungal diseases, resistance, taxol 5616
  - medicinal plants, reviews, taxol 208
- ***Taxus baccata***
  - bark
    - chemistry, esters 1253
    - medicinal plants, plant composition, taxol, seasonal variation 8685
  - botany, genetic resources, ornamental woody plants, reviews 1202
  - embryo culture, taxol 4292
  - fungal diseases, *Diplodia taxi,* New Zealand 5650
  - genetic variation, population genetics, Poland 8207
  - insect pests, *Taxomyia taxi,* UK, population dynamics, parasitoids 2368
  - medicinal plants
    - taxol 8684
      - analytical methods 1811
  - natural regeneration, nature conservation, Germany 2631
  - nature conservation, Germany 9778
  - plant morphology, habit, taxonomy, Poland 1206
  - reviews, Germany 9778
  - silvicultural systems, stand development, Slovakia 6909
  - vegetative propagation, shoot cuttings 868
  - wood chemistry, esters 1253
- ***Taxus brevifolia***
  - bark, damage, increment, USA 1005
  - endangered species, medicinal plants 209
  - fishes, water quality, forest ecology, USA 2170
  - foliage, chemistry, chemotaxonomy, flavonoids 5391
  - genetic variation, isoenzymes, inbreeding, Canada 574
  - medicinal plants
    - bark, USA, taxane 417
    - foliage, USA, taxane 417
    - plant composition, taxol, biosynthesis 3011
    - taxol, analytical methods 1811-1812
  - plant composition, taxanes, methodology 2496
  - tissue culture
    - cell suspensions, metabolites, culture media 9567
    - embryo culture, growing media 7738
  - vegetative propagation, shoot cuttings 868
- ***Taxus canadensis,*** vegetative propagation, shoot cuttings 868
- ***Taxus cuspidata***
  - bark, chemistry, extractives 3738
  - foliage, chemistry, extractives 3738
- ***Taxus cuspidata*** *cont.*
  - medicinal plants
    - diterpenoids 9813
    - taxol, biosynthesis, hydroponics 2679
  - vegetative propagation, shoot cuttings 868
- ***Taxus media***
  - cell culture, metabolites, taxol 863
  - medicinal plants, taxol, biosynthesis, hydroponics 2679
- ***Taxus wallichiana***
  - bark, taxanes 9809
  - endophytes, *Phoma,* Nepal, medicinal plants 3144
  - foliage
    - diterpenoids 9806
      - phenolic compounds 9800
- ***Taxus yunnanensis,*** plant composition, taxanes 9807
- **Technology transfer**
  - agroforestry, research projects, USA 9272
  - forestry, innovation adoption, Pakistan 3347
  - USA 4246
- ***Tecoma stans***
  - foliage, chemistry, fodder, India 7170
  - street trees, drought tolerance, USA, testing 4509
- ***Tecomella undulata***
  - foliage, extracts, *Prosopis cineraria,* seedling growth, allelopathy 2161
  - shelterbelts, species trials, soil properties, India 3689
  - tissue culture, explants, culture media, micropropagation 6889
- ***Tectona grandis***
  - agroforestry, increment, India 4110
  - bacterial diseases, *Pseudomonas solanacearum,* forest nurseries, Bangladesh, control 6638
  - cambium, cell division, seasonal variation 4644
  - dendroclimatology, Indonesia 10160
  - diameter, fruits, seed germination, India 846
  - farm forestry
    - Lao 8409
    - soil fertility, India 2902
  - flowering, seed quality, India 482
  - forest economics, forest management, planning, India 2786
  - forest litter, decomposition, fungi, India 2822
  - forest nurseries
    - containers, seedling growth, survival, Bangladesh 6076
    - fertilizers, sewage, India 6905
  - forest plantations
    - age, phosphorus fertilizers, increment, Venezuela 4307
    - forest influences, soil chemistry, lateritic soils, India 8023
    - improvement planting, Indonesia 931
    - increment, forest economics, Indonesia 6188
    - India 8628
    - Indonesia 930
    - models, biodiversity, conservation, India 4338
    - plant nutrition, site class assessment, West Africa, growth effects 4545
    - sample plot technique, growth models 6210
    - soil biology, India, seasonal variation 7940
    - synecology, ground vegetation, biomass production, India 9933
  - forests
    - soil chemistry, India, statistical analysis 1901
    - synecology, medicinal plants, Indonesia 1808
  - genetic improvement, India 3991
  - genetic variation, isoenzymes 8246
  - grafting, seed orchards, establishment, India 6043
  - increment, forest plantations, weed control, India 161

Tectona grandis *cont.*
- insect pests
  - *Cossus cadambae*
    - India 2332
      - biology 2317
      - damage 2317
  - *Eutectona machaeralis*
    - control 671
    - development 7456
    - entomogenous fungi, *Beauveria bassiana* 5710
  - *Holotrichia serrata,* forest nurseries, Sri Lanka, chemical control 5782
  - *Hyblaea puera,* entomogenous fungi, *Beauveria bassiana* 5710
- mistletoes, Loranthaceae, Indonesia 1468
- planting stock, seedlings, NPK fertilizers, India 1721
- provenance trials
  - India 6019
  - Sri Lanka 5056
- radionuclides, fallout, age determination 1151
- reclamation
  - eroded soils, community forestry, choice of species, Indonesia 3237
  - mined land, India, economics 3248
- reproductive behaviour, India 7210
- seed germination, storage, provenance, India 6036
- seed orchards
  - agroforestry, weed control, India 1554
  - tree breeding, budding, Peninsular Malaysia 7742
- seedling growth, genetic improvement, India 6593
- silviculture, forest management, Indonesia, forest policy 8668
- taungya, Myanmar, history, sociology 9266
- thinning, India, management, stand density 8654
- tissue culture, micropropagation, tree breeding, India 2598
- vegetative propagation, India, reviews 100

Temperate Zones
- agroforestry 5867
  - conferences 8485
  - Europe 5888
  - land use, change, Industrial Countries, conferences 9324
- climatic change, forests, forecasting 3541
- deciduous forests, phenology, reproductive behaviour, seasonality 8126
- forests, forest management, natural resources 8517
- land use, forestry 1545
- phenology, buds, climatic change, simulation 7865
- *Picea,* natural regeneration 3840
- *Populus,* plant composition, propolis 1232
- woody plants, species diversity, vegetation types 2149

Temperature
- *Acacia,* seedling growth, sowing depth, drought resistance 4312
- *Alnus rubra,* seedling growth, photosynthesis, nitrogen fixation, plant water relations 1294
- *Betula pendula*
  - carbon dioxide enrichment, seedling growth, photosynthesis, transpiration 2997
  - foliage, phenology, defoliation, plant nutrition 4617
  - shoots, phenology, genetic variation 8041
- *Betula pubescens,* air pollution, ozone, light, damage 9753
- broadleaves
  - seed germination 76
  - seedlings, phenology, carbon dioxide enrichment, soil fertility 7864
- *Calliandra calothyrsus,* root nodules, development, seedling growth 6621

Temperature *cont.*
- conifers
  - carbon dioxide enrichment, plant physiology, simulation, measurement 1609
  - foliage, amino acids, photoperiod, seasonal variation 9842
  - pollen, maturation, Canada 6038
  - provenance trials, climatic change, adaptation, simulation 1660
- *Cryptomeria japonica,* pollen, dispersal, Japan 4729
- *Erythrina caffra,* seed germination 9435
- *Eucalyptus tetrodonta,* photosynthesis, carbon dioxide enrichment, light, vapour pressure 8937
- fungal diseases, *Botrytis cinerea, Picea mariana,* disease resistance, control 1450
- *Guilfoylia monostylis,* seed germination 9435
- heat tolerance, *Picea mariana,* protein synthesis, heat shock proteins, diurnal variation 9850
- *Leptospermum scoparium,* cold resistance, hardening, New Zealand, variation 8762
- *Muntingia calabura,* seed germination, plant growth regulators, light 9440
- *Picea abies*
  - carbon dioxide enrichment, seedling growth, photosynthesis, transpiration 2997
  - increment, Germany 7818
  - photosynthesis, photoinhibition, light, Germany 1292
  - seed germination 9427
  - seedling growth, phenology, genetic variation, photoperiodism 8040
- *Picea glauca,* planting stock, storage, Canada 6079
- *Picea rubens,* plant physiology, USA 8934
- *Picea sitchensis,* buds, phenology, carbon dioxide enrichment, UK 2008
- *Pinus*
  - geographical distribution, climatic zones 7867
  - seed germination, forest fires, simulation 9774
- *Pinus cembra,* increment, Austria 2799
- *Pinus patula,* seed germination, seed moisture, seedling growth, light 78
- *Pinus pinaster,* seedling growth, photoperiod, tree breeding 6429
- *Pinus ponderosa,* seedling growth, gas exchange, carbon dioxide enrichment 3552
- *Populus tremuloides,* gas exchange, isoprenoids, seasonal variation, USA 4681
- *Quercus,* foliage, light, USA 3791
- *Sesbania sesban,* root nodules, development, seedling growth 6621

Tending, brush cutters, Canada, softwoods 9549

Tension wood, *Fraxinus mandshurica,* wood anatomy 8891

Tenure systems, tropical forests, forest management, community forestry, Latin America 3494

Tephrosia, stomata, taxonomy, India 5428

Terminalia amazonia, rain forests, Mexico, wood anatomy 1211

Terminalia arjuna
- air layering, India 108
- allelopathy, foliage, extracts 3106
- energy value, seasonal variation, India 2541
- foliage
  - genetic variation 5525
  - plant water relations, biomass production, India 8821
  - sugars, photosynthesis 6485
- genetic variation, selection criteria, India 580
- insect pests
  - *Apoderus tranquebaricus,* India, damage 650
  - *Myllocerus undecimpustulatus,* India, chemical control 6668

Terminalia arjuna *cont.*
- planting season, sodic soils, India 6115
- species trials, reclamation, sodic soils, India 712
- tree breeding, phenotypic selection, India 6601

Terminalia bellirica
- energy value, seasonal variation, India 2541
- foliage
  - plant water relations, biomass production, India 8821
  - sugars, photosynthesis 6485
- increment, fertilizers, oilseed cakes 6896
- medicinal plants, degraded forests, Sri Lanka 5851
- seed collection, seed treatment, seedling growth, India 2572
- seed germination, seed treatment, temperature 81

Terminalia brevipes, browse, indigenous knowledge, Kenya 6669

Terminalia brownii
- irrigated stands, volume determination, equations, Kenya 5960
- seedlings, forest plantations, water stress, irrigation, Kenya 3611

Terminalia catappa
- photosynthesis, photoinhibition, Papua New Guinea, simulation, canopy gaps 1287
- stem form, buttresses, plant competition, Papua New Guinea 3876

Terminalia chebula
- air layering, India 108
- medicinal plants, degraded forests, Sri Lanka 5851
- seed collection, seed treatment, seedling growth, India 2572
- seed germination, seed treatment, temperature 81

Terminalia ferdinandiana, foliage, chemistry, Australia 7081

Terminalia ivorensis, mycorrhizas, *Acaulospora excavata,* Côte d'Ivoire 600

Terminalia orbicularis, browse, indigenous knowledge, Kenya 6669

Terminalia sericea, forest influences, soil fertility, savannas, Zimbabwe 6369

Terminalia superba
- improvement planting, biomass, Zaire, growth 6981
- isoenzymes, sampling, methodology, techniques 1612
- mycorrhizas, *Acaulospora excavata,* Côte d'Ivoire 600

Terminalia tomentosa
- cambium, cell division, seasonal variation 4644
- degraded forests, stand structure, synecology, India 213
- foliage, genetic variation 5525
- forest plantations, forest influences, soil chemistry, lateritic soils, India 8023
- insect pests, *Myllocerus undecimpustulatus,* India, chemical control 6668
- tree breeding, phenotypic selection, India 6601

Terminologies (*see* Glossaries)

Terminology
- forest management
  - Australia 6796
  - sustainability, conservation 5935
- mensuration, Australia 6796
- silvicultural systems, selection system, German 5936

Termites
- China, research 5684
- insect pests, biology, control, teaching materials 7432

Terracing (*see* Contour ridging)

Tetracentron sinense, embryology, taxonomy 2053

Tetraclinis articulata
- forest plantations
  - establishment, mortality, seasonal variation, Spain 1746
  - height, increment, climate, Spain 1826

- ***Tetragastris panamensis***
  - forest litter, decomposition, drought, Panama 1916
  - ultraviolet radiation, plant physiology, Panama 6257
- ***Tetrameles nudiflora***
  - botany, Thailand 3863
  - wood anatomy 414
- ***Tetranychus quercivorus,*** insect pests, *Quercus crispula,* Japan 9178
- ***Tetrao parvirostris,*** birds, *Larix gmelinii,* Russia, feeding behaviour 8360
- ***Tetrao tetrix,*** birds, forest management, decision making, simulation 9200
- ***Tetrao urogallus***
  - birds
    - boreal forests, Finland 4061
    - forest management, UK 4929
    - Germany, habitats 6688
    - Italy, ecology 698
    - *Pinus sylvestris*
      - foliage, browse, Norway 4056
      - UK 688
- **Thailand**
  - *Acacia auriculiformis,* provenance trials, plant morphology, growth 5050
  - agroforestry, education, international cooperation 9267
  - Anacardiaceae, checklists 3862
  - *Azadirachta,* planting stock, production 2622
  - bamboos, *Thyrsostachys siamensis,* thinning, disease resistance, pest resistance 1775
  - broadleaved evergreen forests, botanical composition, spatial distribution, species diversity 8996
  - community forestry
    - development projects, non-governmental organizations, conferences 774
    - sustainability, development projects 5889
  - deforestation, land use, sustainability, water resources 707
  - *Dicellostyles zizyphifolia,* taxonomy 8973
  - farm forestry 7567
    - surveys, trees, products, utilization 1548
  - forest influences, hydrology, erosion, research 358
  - forest management, forest ownership, forest policy 8518
  - forest policy, food supply 5035
  - forestry
    - deforestation, forest management, women, attitudes 8528
    - development projects, international cooperation, reports 760
  - insect pests
    - bamboos 9135
    - *Lepidomyctides nagaii, Bambusa multiplex* 7465
  - mangrove forests, nature conservation 8997
  - multipurpose trees
    - agroforestry, development projects, reclamation, degraded forests 3242
    - reclamation, mined land 3243
  - Myrtaceae, taxonomy 8972
  - *Pinus kesiya,* deforestation, stand structure 10094
  - provenance trials, *Acacia auriculiformis* 6867
  - *Pterocarpus macrocarpus,* genetic variation, isoenzymes 9059
  - remote sensing, land use, deforestation 7852
  - *Tetrameles nudiflora,* botany 3863
- ***Thamnocalamus aristatus,*** bamboos, epidermis, anatomy 9789
- ***Thamnocalamus falconeri,*** bamboos, epidermis, anatomy 9789
- ***Thamnocalamus spathiflorus,*** bamboos, epidermis, anatomy 9789
- ***Thaumetopoea pityocampa,*** insect pests, *Pinus pinaster,* forest decline, France 4038
- ***Thaumetopoea wilkinsoni,*** insect pests, *Pinus,* Israel, parasitoids 2365
- ***Thecodiplosis brachyntera,*** insect pests, *Pinus sylvestris,* Europe 5769
- ***Thecodiplosis brachyptera,*** insect pests, *Pinus sylvestris,* Poland, damage, assessment 4030
- ***Thecodiplosis japonensis***
  - insect pests
    - *Pinus*
      - East Asia 5769
      - endophytes, Japan 8252
- ***Thelephora terrestris***
  - mycorrhizas
    - *Pinus patula,* forest nurseries, seedling growth 4850
    - *Pinus ponderosa,* forest nurseries, Argentina 4009
    - *Pinus sylvestris,* heavy metals, toxicity 5601
- **Theory**
  - forest management, forest ecology 9571
  - *Pinus taeda,* breeding programmes, genetic diversity 7358
  - *Quercus,* genetic diversity, chloroplast genetics, statistics 7374
  - social forestry, Asia, deforestation 10120
  - stand structure, development, silviculture, forest management 5191
- **Thermal properties,** remote sensing, canopy, Brazil 1032
- **Theses**
  - *Albizia coriaria,* agroforestry, indigenous knowledge, Uganda 9282
  - *Ficus natalensis,* agroforestry, indigenous knowledge, Uganda 9282
  - symbiosis, *Bradyrhizobium, Faidherbia albida,* Senegal 5667
- ***Thespesia populnea,*** foliage, chemistry, fodder, India 7170
- **Thinning**
  - *Abies balsamea,* increment, soil water regimes, USA 1774
  - *Abies sachalinensis,* slopes, geographical information systems, Japan, planning 6934
  - *Alnus cordata,* Italy, growth 1772
  - *Alnus incana,* short rotation forestry, Sweden 7769
  - *Alnus rubra,* increment, USA 5150
  - bamboos, *Thyrsostachys siamensis,* Thailand, disease resistance, pest resistance 1775
  - *Betula,* boreal forests, biomass production, Russia 9527
  - *Betula papyrifera,* plant physiology, Canada, effects 9516
  - *Betula pendula,* stems, quality, wood properties, Western Europe 9519
  - boreal forests
    - Finland, conferences 6810
    - Russia, conferences 6810
  - broadleaves, North America 162
  - *Chamaecyparis obtusa*
    - ground vegetation, Japan, *Rubus palmatus,* growth 1391
    - landscape, Japan, aesthetic value, economics 8653
  - conifers
    - Canada, planning 4353
    - forest plantations, Italy 945
    - Japan, roads, economics 9522
    - photointerpretation, stand structure, equations 8655
    - stand structure, Japan, equations, growth 3479
  - *Cryptomeria japonica*
    - crown
      - biomass, simulation 4352
      - light, simulation, Japan 1773
    - whole tree logging, forestry machinery, mobile units 4369
  - deciduous forests, stand characteristics, USA 2165
  - decision making, forest economics, equations 1871
  - *Eucalyptus regnans,* biomass production, light, Australia 8650
  - *Fagus crenata,* transpiration, stand characteristics, Japan 1927
  - *Fagus sylvatica*
    - Denmark 6936
    - fungi, Slovakia 7383
- **Thinning** *cont.*
  - *Fagus sylvatica cont.*
    - increment, Slovenia 5149
  - forest ownership, Japan, forest economics 7791
  - forest plantations, conifers, France, planning, forest economics 2654
  - forest trees, pruning, Germany 9525
  - forestry machinery, Canada 4368
  - fungal diseases
    - *Armillaria, Picea abies,* Sweden 5625
    - *Armillaria ostoyae,* conifers, USA 10008
    - *Endocronartium harknessii, Pinus banksiana,* Canada, distribution 6632
    - *Heterobasidion annosum, Picea abies,* Sweden 5624-5625
  - increment, stand development, *Pseudotsuga menziesii,* Germany 944
  - insect pests, *Coloradia pandora, Pinus ponderosa,* USA 9148
  - *Larix olgensis,* China, growth 8652
  - *Lithocarpus densiflorus,* canopy, USA 4356
  - logging effects, *Fagus sylvatica,* Austria, simulation 227
  - mechanization, Sweden 5159
  - mycorrhizas, *Abies,* controlled burning, USA 3145
  - natural thinning
    - forest trees
      - Finland, mathematical models 9959
      - plant competition, simulation 9362
      - stand density, growth models 9538
      - stand development, growth models 5963
    - *Pinus sylvestris,* stand characteristics, Sweden 3460
    - *Pinus taeda,* USA, equations 3456
  - *Picea,* boreal forests, biomass production, Russia 9527
  - *Picea abies*
    - crown, development, simulation 795
    - stand characteristics, Sweden 9520
    - stand development, strip roads, Sweden 6983
  - *Picea sitchensis,* natural regeneration, USA 928
  - *Pinus,* increment, USA 4355
  - *Pinus banksiana*
    - injuries, Canada 946
    - plant morphology, Canada, growth 6127
    - wood density, increment, Canada 6364
  - *Pinus caribaea,* growth models, Australia, economic evaluation 8648
  - *Pinus halepensis,* yield tables, France 6987
  - *Pinus kesiya*
    - increment, Madagascar, wood properties 8858
    - spacing, increment, Zimbabwe 6942
    - stem form, eccentricities, Madagascar 4634
  - *Pinus koraiensis,* planting, Korea Republic, growth 8656
  - *Pinus nigra,* agroforestry, France, simulation, growth 9268
  - *Pinus palustris,* growth models, USA 4393
  - *Pinus radiata*
    - experimental design, statistical analysis, New Zealand 5015
    - fertilizers, Australia 1708
  - *Pinus resinosa*
    - forest plantations
      - simulation, USA 8508
      - yield forecasting, growth models, Canada 5966
  - *Pinus sylvestris*
    - crown, Finland, simulation 8649
    - drainage, forest economics, simulation 9521
    - fertilizers, wind damage, snow damage, Sweden 3560
    - increment, urea, Sweden 3487

Thinning *cont.*
- *Pinus sylvestris cont.*
  - nitrogen fertilizers, forest economics, Russia 9517
  - silvicultural conversion, Germany 9498
  - stand characteristics, Sweden 9520
- *Pinus taeda*
  - controlled burning, USA, mortality 176
  - crown
    - fertilizers, USA 2011
    - simulation, USA 5148
  - foliage, fertilizers, USA 2011
  - forest plantations, plant competition, USA 2122
  - increment, mechanization 3452
  - understorey, species diversity, USA 1765
  - USA 6128
    - environmental impact 6935
    - wood properties 4587
- planning
  - *Eucalyptus pilularis,* Australia 4351
  - forest trees, Germany 9526
  - *Pinus taeda* 3453
- *Populus* 'DN-74', coppice, Canada 148
- *Pseudotsuga menziesii*
  - France 6129
  - increment, Germany 9523
  - understorey, biomass, Canada 3454
- *Quercus*
  - birds, USA, ecology 1524
  - direct sowing, Poland 6107
  - group planting, Poland 6107
  - USA, stand development, growth 174
  - yield forecasting, USA 2712
- *Quercus ilex,* increment, Spain 2653
- *Quercus kelloggii,* epicormics, USA 2946
- *Quercus petraea,* plant water relations, France, effects 7066
- *Quercus pubescens,* agroforestry, France, simulation, growth 9268
- remote sensing, Sweden, reflectance 4443
- selection criteria
  - conifers, Russia 2652
  - *Pinus sylvestris,* increment, variation, Germany 999
- *Sequoia sempervirens,* increment, USA 4357
- soil, Argentina 177
- stand characteristics, forest economics, decision making 9524
- stand density, forest management 8651
- *Tectona grandis,* India, management, stand density 8654
- *Tsuga heterophylla,* natural regeneration, USA 928
- USA, bibliographies 2457
- water stress, soil water, growth 6907
- wildlife
  - birds, *Eucalyptus,* Australia 5822
  - marsupials, *Eucalyptus,* Australia 5822

Thomomys
- mammals
  - USA
    - control 9228
    - vegetation 7918

Thomomys talpoides, wildlife, conifers, USA, damage 6922

Thrinax radiata, stand characteristics, forest management, sustainability, Mexico 7327

Throughfall
- alpine vegetation, air pollution, soil chemistry, Europe 5321
- *Azadirachta indica,* stemflow, interception, India 706
- chemistry
  - coniferous forests
    - acid deposition, Bulgaria 7982
    - Canada 1991
  - deciduous forests, Canada 1991
  - forest influences, precipitation, India 9761
- coniferous forests
  - acid deposition, USA, spatial variation 7657
  - air pollution, soil chemistry, Europe 5321

Throughfall *cont.*
- conifers
  - air pollution
    - deposition, precipitation, Western Europe 2866
    - plant nutrition, Netherlands, nitrogen 5318
    - soil chemistry, Sweden, nitrates 5245
  - biogeochemistry, acid deposition, soil chemistry, Europe 3664
- deposition, chemistry, *Picea abies,* Sweden 1532
- isotopes, *Picea,* forest influences, USA 7124
- *Picea abies*
  - air pollution
    - precipitation, Switzerland, trace elements 4552
    - soil chemistry
      - Czech Republic 2863
      - Germany, nitrogen 5241
- *Picea rubens,* air pollution, USA 2870
- *Picea sitchensis,* air pollution, soil chemistry, UK, nitrates 5242
- *Pinus monticola,* canopy, USA 3690
- *Pinus ponderosa,* air pollution, USA 8845
- *Quercus leucotrichophora,* stemflow, interception, India 706
- rain forests, Peru 6251
- *Rhododendron arboreum,* stemflow, interception, India 706
- stemflow, *Fagus sylvatica,* acid deposition, Italy, chemical composition 337

Thuja, insect pests, *Phloeosinus,* Austria 9167

Thuja occidentalis
- cambium, Germany, sucrose, seasonal variation 431
- dendroclimatology, Canada 2440
- drought, water stress, transpiration, adaptation 5281-5282
- essential oils, foliage, Japan, seasonal variation 6445
- increment, plant physiology, Canada 8699
- insect pests, *Thyridopteryx ephemeraeformis,* USA, control 6665
- shoot cuttings, landscape, Canada 6041
- stems, anatomy, plant water relations, Canada 2936
- water stress, cavitation 7060
- weed control, USA, herbicides 8644

Thuja orientalis
- fungal diseases, *Pestalotiopsis funerea,* Italy 2266
- plant morphology, habit, taxonomy, Poland 1206
- roots, chemotaxonomy, mitosis, ascorbic acid 9899
- seedlings, soil toxicity, aluminium, growth 9709
- species trials, exotics, arboreta, New Zealand 2545
- taxonomy, plant morphology, habit, Poland 2114

Thuja plicata
- advance growth, liberation felling, USA 2627
- clear felling, soil properties, understorey, Canada 3585
- dead wood, decomposition, USA 4497
- decay, Canada, measurement, statistical analysis 4392
- fishes, water quality, forest ecology, USA 2170
- forest litter
  - decomposition
    - Canada, nitrogen, availability 7912
    - hydrology, USA 7897
  - nitrogen, mineralization, Canada 6288
- forest plantations, weed competition, *Gaultheria shallon,* Canada, growth 9514
- frost resistance, photosynthesis, plant nutrition 8820
- genetic variation, isoenzymes, genetic erosion 9966

Thuja plicata *cont.*
- humus, mineralization, fertilizers, Canada 6289
- mixtures, Germany 9593
- planting stock
  - frost resistance, Canada, plant morphology 1724
  - plant physiology, Canada, measurement 1723
  - quality, cytology, methodology 5005
- population genetics, seedling growth, frost resistance, USA 1429
- seedling growth, light, Canada 6253
- self pollination, Canada 2110
- site preparation, Canada, weed control, *Rubus parviflora* 163
- soil organic matter, mixing, Canada, nutrients 6278
- soil water, measurement, time domain reflectometry, USA 9688
- temperature, carbon dioxide enrichment, plant physiology, simulation, measurement 1609
- volume determination, Canada, stumps, residues 2684

Thuja standishii, essential oils, foliage, Japan, seasonal variation 6445

Thujopsis dolabrata
- dendrochronology, Japan, history 4139
- natural regeneration, stand structure, Japan, history 3433
- seedlings, light, photosynthesis, understorey, Japan 6255
- stand characteristics, geographical distribution, Japan 4766
- stem form, roots, snow damage, Japan, plant morphology 4631

Thyridopteryx ephemeraeformis, insect pests, *Thuja occidentalis,* USA, control 6665

Thyrinteina arnobia
- insect pests
  - *Eucalyptus,* Brazil 3181
  - *Eucalyptus citriodora,* Brazil 2326

Thyrsostachys siamensis
- bamboos
  - seed germination, plant growth regulators 3380
  - thinning, Thailand, disease resistance, pest resistance 1775
- fungal diseases, *Fusarium,* thinning, disease resistance, Thailand 1775
- insect pests
  - *Cyrtotrachelus,* thinning, pest resistance, Thailand 1775
  - *Pseudoregma,* thinning, pest resistance, Thailand 1775

Tilia
- beekeeping, spacing, USA 6950
- mixed forests, understorey, quality, Poland 1816
- natural regeneration
  - stand characteristics, botanical composition, climatic change, Poland 7330
  - stand structure, botanical composition, development, Poland 7329
- salamanders, clear felling, USA, population dynamics 3195
- stress factors, forest health, Netherlands 1296
- transplanting, Germany 4979
- urban forestry, amenity trees, Germany 2432

Tilia americana
- bark, thickness, fire resistance, USA 1197
- crown, competition, USA, growth 2692
- foliage, plant morphology, apical meristems 2044
- insect pests, *Lymantria dispar,* USA, resistance 2318
- site class assessment, stand density, USA 1839
- soil chemistry, nitrogen, soil biology, USA 307

Tilia argentea *(see Tilia tomentosa)*

Tilia cordata
- cambium
  - growth
    - development 7156

Tilia cordata *cont.*
- cambium *cont.*
  - growth *cont.*
    - grain and figure 390
- diameter, Italy, variation 2685
- forest litter, cycling, Sweden 2820
- frost resistance, roots, Russia 279
- insect pests
  - *Eucallipterus tiliae,* biological control, USA 4898
  - *Oxycarenus lavaterae,* Yugoslavia 2314
  - *Pulvinaria regalis,* UK, biology 5697
- insects, Lepidoptera, Finland, food plants 2299
- mined land, Germany, clay soils 1538
- mixed forests, natural regeneration, synecology, Poland 8179
- phenology
  - climatic change, Europe 4618
  - Slovakia 7144
- plant competition, increment, statistical analysis, Germany, mixtures 791
- riparian forests, Slovakia 519
- seedling growth, root zone temperature 6275
- seedlings, sap flow, measurement 3618
- seeds, propagation, Italy 5062
- shoot cuttings, Italy 5062
- soil pH, soil organic matter, Sweden 2816
- street trees, pruning, USA, wood residues 4983
- ungulates, forest management, national parks, Poland 4058
- water stress
  - France, distribution 3610
  - UK, distribution 3610

Tilia europaea
- insect pests, *Eucallipterus tiliae,* biological control, USA 4898
- wood chemistry, esters 1253

Tilia henryana, ornamental woody plants, arboriculture 9309

Tilia mandshurica, seeds, Korea Republic 8573

Tilia oliveri, ornamental woody plants, arboriculture 9309

Tilia platyphyllos
- agroforestry, Corsica 5883
- frost resistance, roots, Russia 279
- insect pests, *Eucallipterus tiliae,* biological control, USA 4898
- seed germination, seed treatment 2562
- seeds, propagation, Italy 5062
- shoot cuttings, Italy 5062
- taxonomy, plant morphology, habit, Poland 2114

Tilia tomentosa
- seeds, propagation, Italy 5062
- shoot cuttings, Italy 5062

Tilia vulgaris (*see Tilia europaea*)

Tillage
- boreal forests, forestry practices, soil compaction, Canada 1089
- broadleaves, reclamation, mined land, USA 4093
- *Daemonorops pericanthus,* seedling growth, *Cassia siamea,* underplanting, Indonesia 6149
- forestry machinery, depth 190
- subsoiling, soil physics, machinery, testing 2809

Timber trade
- private forestry, marketing, USA, simulation 2777
- trade sanctions, deforestation, forest policy, simulation, Tropics 4956

Timur, *Santalum* 4168

Tipuana tipa, radionuclides, fallout, age determination 1151

Tipuana tipu, species trials, salt tolerance, Australia, survival, growth 5052

Tissue culture (*see also* Vegetative propagation)
- *Abies fraseri,* Christmas trees 6144
- *Abies grandis,* enzymes, isomerases 3399
- *Acacia auriculiformis,* techniques 4285
- *Acer rubrum,* cultivars, vegetative propagation, growth, plant physiology 7734
- *Agathis borneensis,* Brunei Darussalam 6893
- anther culture, *Prunus avium,* genetics, isoenzymes 5090
- bamboos, *Bambusa beecheyana,* somatic embryogenesis 7805
- *Betula pubescens* × *Betula papyrifera,* culture media, copper 2588
- books 6789
- bud culture
  - *Acacia auriculiformis* 9451
  - encapsulation, *Chamaecyparis obtusa,* techniques 4286
  - micropropagation
    - bamboos
      - *Bambusa* 6047
      - *Dendrocalamus* 6047
    - *Larix decidua* 4289
  - somatic embryogenesis, *Picea omorika,* benzyladenine 88
- buds, micropropagation, *Platanus acerifolia* 5084
- callus
  - *Aralia elata,* medicinal plants, adventitious roots 6053
  - *Betula pendula* × *Betula pubescens,* culture media 120
  - fungal diseases, *Ophiostoma ulmi, Ulmus,* resistance 5635
  - *Michelia champaca* 87
  - *Picea abies*
    - *Heterobasidion annosum* 8258
    - light
      - cytoplasmic inclusions
        - chloroplasts 395
        - tannins 395
    - mycorrhizal fungi 8258
  - *Populus alba,* light, chemistry 6487
  - *Strychnos nux-vomica,* medicinal plants, indole alkaloids 9564
  - *Ulmus americana,* culture media, coconut milk 4863
  - *Zanthoxylum zanthoxyloides,* medicinal plants, metabolites, isoquinoline alkaloids 2579
- cell culture
  - *Acer pseudoplatanus*
    - enzymes, peroxidases 3775
    - ethylene production 8104
      - plant growth regulators 7179
    - plant physiology, energy metabolism 9845
  - *Betula pendula* 875
  - *Eucalyptus grandis,* techniques 90
  - *Eucalyptus grandis* × *Eucalyptus camaldulensis,* techniques 90
  - *Eucalyptus perriniana*
    - metabolites
      - eucalyptol 2580
      - sesquiterpenoids 2581
  - *Eucalyptus polybractea,* enzymes, lyases 4702
  - metabolites, *Taxus media,* taxol 863
  - *Picea abies,* metabolites, enzymes 110, 867, 6885
  - *Pinus taeda,* lignin, synthesis 8101
  - *Populus alba*
    - biotechnology, methodology 9336
    - enzymes, plant growth regulators 4701
    - xyloglucans 9834
  - protoplasts, bamboos, *Dendrocalamus membranaceus* 8587
- cell cultures, *Pinus sylvestris,* metabolites, stilbenes 3762
- cell suspensions
  - cellular biology, conifers 5945
  - cryopreservation, somatic embryogenesis, *Picea sitchensis,* techniques 9445
  - *Eucalyptus polybractea,* phenylalanine 9450
  - metabolites
    - culture media, *Taxus brevifolia* 9567
    - isolation, *Taxus* 9331
- cryopreservation, *Corylus avellana,* seeds 5102
- culture media
  - broadleaves, planting stock 5073

Tissue culture *cont.*
- culture media *cont.*
  - carbohydrates, rooting, *Quercus suber* 5100
  - micropropagation
    - *Hopea odorata* 8583
    - *Picea omorika* 8582
    - *Ulmus pumila* 8584
- Dipterocarpaceae, Brunei Darussalam 6893
- embryo culture
  - *Abies balsamea* 1699
  - *Calamus rotang,* plant parasitic nematodes, roots, galls 8347
  - callus, *Santalum album,* plant composition, proteins 419
  - culture media
    - *Cupressus sempervirens* 5066
    - *Fraxinus excelsior* 9454
    - micropropagation
      - *Azadirachta indica,* India 2605
      - *Ilex paraguariensis* 870
    - *Picea abies* 873, 6067
  - growing media, *Taxus brevifolia* 7738
  - *Juniperus cedrus* 7747
  - micropropagation, *Pinus banksiana* 1701
  - *Picea abies,* plant growth regulators 8926
  - *Picea mariana,* genetic engineering, enzymes, β-glucuronidase 3975
  - somatic embryogenesis, *Abies alba* 5103
  - *Sophora japonica* 838
  - *Taxus baccata,* taxol 4292
- *Eucalyptus,* breeding programmes, pulpwood production, South Africa 552
- *Eucalyptus camaldulensis,* foliage, carbon dioxide enrichment, growth, anatomy 7741
- *Eucalyptus perriniana,* metabolites, camphor 2578
- explants
  - culture media
    - *Acacia auriculiformis* 865
    - *Alnus nepalensis* 112
    - *Anogeissus acuminata* 3402
    - chemistry, *Juglans regia* × *Juglans nigra* 2587
    - *Cornus florida* 1703
    - *Crataegosorbus miczurinii* 109
    - *Eucalyptus globulus* 2595
    - micropropagation
      - *Maesopsis eminii* 874
      - *Tecomella undulata* 6889
  - *Elaeagnus angustifolia* 5104
  - embryogenesis, *Ginkgo biloba,* techniques 1696
  - metabolites, phenols, *Eucalyptus* 2606
  - micropropagation
    - *Limonia acidissima* 2592
    - *Morus laevigata* 2594
    - *Prosopis cineraria* 2593
  - necrosis, *Quercus rubra,* plant water relations, plant nutrition 6065
  - *Picea abies* 5086
  - *Pinus eldarica* 1688
  - *Populus,* hybrids 9447
  - *Quercus robur*
    - in vitro culture 4276
    - shoots, development 3395
  - storage, *Populus tremula* × *Populus tremuloides* 1704
- forest plantations, mycorrhizas, Asia, conferences 8483
- forest trees
  - medicinal plants, metabolites, books 749
  - research, Germany 7735
  - tree breeding, genetic engineering 8189
- *Fraxinus excelsior* 2608
- fungal diseases
  - *Phaeolus schweinitzii, Pinus nigra,* defence mechanisms 8287
  - *Phytophthora, Castanea sativa,* resistance 6892
- *Glochidion multiloculaire* 7732
- grafting, *Picea abies* 125

Tissue culture *cont.*
- in vitro culture
  - *Acanthopanax sciadophylloides,* bud culture 3393
  - broadleaves, cold storage 8580
  - micropropagation
    - *Sequoia sempervirens,* reviews 2591
    - *Shorea roxburghii* 9448
  - multipurpose trees, development projects, Djibouti 9444
  - *Prunus avium* 8585
- *Juglans regia* 862
- *Keilmeyera coriacea* 5081
- *Larix decidua,* ploidy 7359
- metabolism, metabolites, *Erythrina caffra* 2062
- metabolites
  - chemistry, *Maclura pomifera* 9830
  - enzymes, *Cycas revoluta* 8095
  - triterpenoid saponins, *Aesculus hippocastanum* 3470
- micropropagation
  - *Abies concolor* × *Abies grandis,* chromosomes, variation 8191
  - *Albizia julibrissin,* culture media 89
  - *Argania spinosa*
    - mycorrhizas
      - *Glomus intraradices*
        - biomass production 3146
        - growth 3146
        - plant nutrition 3147
  - *Betula* 7743
  - *Betula pendula*
    - light, photosynthesis, foliage 8581
    - planting stock, performance, light 6056
  - conifers, culture media 122
  - culture media
    - bamboos, *Bambusa vulgaris* 9442
    - growing media, *Syringa vulgaris,* Poland 6882
    - *Swartzia madagascariensis* 5076
  - *Eucalyptus globulus,* culture media 1695
  - *Eucalyptus grandis,* USA 878
  - explants
    - culture media
      - *Eucalyptus grandis* × *Eucalyptus urophylla* 4282
      - *Quercus* 6054
      - *Wrightia tinctoria* 6055
  - *Fagus sylvatica* 5096
  - *Fraxinus angustifolia* 117
  - *Fraxinus excelsior,* rooting, development 7733
  - *Grevillea robusta* 5098
  - in vitro culture, *Acacia tortilis,* techniques 5070
  - *Larix,* rooting capacity 123
  - *Limonia acidissima* 5097
  - metabolites, alkaloids, *Catha edulis* 3469
  - multipurpose trees 8577
  - *Pinus canariensis,* culture media 4291
  - *Pinus patula,* South Africa 4277
  - *Pinus pinaster,* adventitious roots 5075
  - *Pinus radiata,* genetic variation 5095
  - *Populus* 'Hunnegem', ontogeny, ploidy 5092
  - *Prunus serotina,* paclobutrazol 3392
  - *Quercus* 5080
  - *Quercus acutissima* 5071
  - *Quercus robur,* Italy, techniques 6058
  - *Tectona grandis,* tree breeding, India 2598
  - *Withania somnifera* 869
  - *Woodfordia fruticosa* 5087
  - *Wrightia tomentosa* 5082
  - *Zanthoxylum simulans* 111
- *Milicia excelsa,* Ghana 6059
- *Morus,* artificial seeds, techniques 6042
- organ culture, *Pseudotsuga menziesii,* maturation, measurement, plant morphology 4653
- organogenesis, *Pinus sylvestris,* mycorrhizas, *Hebeloma cylindrosporum* 1691

Tissue culture *cont.*
- ovule culture
  - micropropagation, *Salix fragilis* × *Salix lispoclados* 5083
  - somatic embryogenesis, *Cercis canadensis,* plant composition, proteins 5085
- *Paulownia,* mycoplasmal diseases 5669
- *Picea abies*
  - genetic transformation 5502
  - genetic variation 1697
  - parthenogenesis 4279
- *Pinus*
  - breeding programmes, pulpwood production, South Africa 552
  - genetic transformation, reviews 6057
- *Pinus contorta,* shoot cuttings, auxins, growth rate 3405
- *Pinus radiata*
  - genetic transformation 5503
  - genetic variation 5094
- *Pinus sylvestris,* genetic transformation 4833
- *Pinus taeda,* tree breeding, reviews 7737
- *Populus*
  - lignification
    - enzymes 5401
    - water stress 4677
- *Populus deltoides,* genetic variation, genetic markers 8232
- *Populus nigra,* buds 4278
- *Populus tremula* × *Populus tremuloides,* roots, development, biochemistry, polyamines 3774
- *Populus tremuloides,* genetic transformation 5560
- protoplast culture
  - *Acacia mangium,* techniques 6886
  - culture media, *Sesbania bispinosa* 5099
  - *Populus simonii* 6895
- protoplasts, culture media, *Populus tremula* × *Populus alba* 92
- *Quercus suber*
  - Italy, micropropagation 4293
  - somatic embryogenesis 8588
- *Salix alba,* galls 6881
- *Sequoia sempervirens,* proteins, growth 2609
- *Sesbania grandiflora,* cotyledons 5093
- shoot tip culture, *Larix decidua,* vegetative propagation, shoot cuttings, grafting 4280
- shoots, rooting, *Populus tremula* × *Populus tremuloides,* plant growth regulators 9455
- somatic embryogenesis
  - *Aesculus hippocastanum* 876
    - explants 5089
  - bamboos
    - *Bambusa vulgaris* 1702
    - *Dendrocalamus* 1702
  - *Betula pendula* 875
  - books 6782
  - *Carya illinoinensis* 118
  - *Ceratozamia hildae* 5101
  - conifers, biochemistry, reviews 4287
  - cryopreservation, *Juglans regia* × *Juglans nigra* 1698
  - culture media, abscisic acid, *Larix eurolepis* 2584
  - development, cell division, microtubules, *Larix eurolepis* 2601
  - growth, *Picea abies,* plant growth regulators, ethylene 2585
  - histology, *Ceratozamia mexicana* 7748
  - *Larix decidua,* protoplasts 121
  - *Larix eurolepis*
    - mitochondrial genetics 573
      - nucleic acids, purification 9032
    - water stress 6894
  - micropropagation
    - culture media, *Picea abies* 8578
    - *Larix eurolepis,* plant growth regulators, abscisic acid 3401
    - *Picea abies* 7744
  - *Nerium oleander* 116
  - *Picea abies* 3398, 5072, 6888

Tissue culture *cont.*
- somatic embryogenesis *cont.*
  - *Picea abies cont.*
    - size, glycoproteins, development 6049
  - *Picea glauca*
    - artificial seeds 119
    - biochemistry 3394
    - culture media, storage, desiccation 7740
    - ethylene 5078
    - gene expression 7357
    - genetic variance, cryopreservation 5079
    - plant growth regulators, abscisic acid 6048
  - *Picea glauca* × *Picea engelmannii*
    - planting stock
      - frost resistance, morphology 1726
      - physiology, Canada 1728
      - quality 1727
  - *Picea mariana* 7746
    - Canada, techniques 4275
  - *Picea sitchensis,* cryopreservation 7745
  - *Pinus caribaea,* glycoproteins 124
  - *Pinus nigra,* anatomy, cytology, development 7739
  - protoplasts, *Cupressus sempervirens* 6050
  - *Quassia simarouba* 115, 5091
- *Sophora toromiro,* endangered species, Easter Island 1700
- tree breeding, India 6044
- *Trema orientalis,* organogenesis 4281
- *Ulmus americana,* foliage 5088

Tocoyena formosa, insect pests, *Atta sexdens rubropilosa,* Brazil 7489

Toddalia
- taxonomy
  - Africa 3045
  - Persian Gulf States 3045

Togo
- *Cassia siamea,* agroforestry, plant competition 7573
- *Cocos nucifera,* forest plantations 8533
- *Leucaena leucocephala,* agroforestry, plant competition 7573
- medicinal plants, plant composition, flavonoids 979
- multipurpose trees, agroforestry, green manures, decomposition, nutrients 8422

Tomicus piniperda
- insect pests
  - China, biology, control 2358
  - *Pinus*
    - China, life tables 9170
    - USA 5746
  - *Pinus sylvestris*
    - Finland, fungal diseases, damage 660
    - France, disease vectors 1934
    - pruning, Sweden, resistance 3183
    - Sweden
      - control
        - natural enemies 2383
        - traps 2383
      - interactions, *Thanasimus formicarius* 7485
    - USA
      - control 9195
      - interspecific competition 7470
  - *Pinus yunnanensis,* China 9169

Toona australis (*see Toona ciliata*)

Toona celebica, wood anatomy, Indonesia 6407

Toona ciliata
- afforestation, mixtures, degraded land, reclamation, Australia 3233
- fungal diseases
  - *Nectria rigidiuscula,* Argentina 8305
  - Pakistan, seeds 2257
- insect pests
  - *Hypsipyla robusta*
    - chemical control 5781
    - India, biological control 672
    - Pakistan, seeds 5679
- seed germination, storage, seed moisture 83

- ***Toona ciliata** cont.*
  - wood chemistry, limonoids, chemotaxonomy, insect pests, resistance 3742
- ***Toona sinensis***
  - varieties, genetic variation, isoenzymes 8243
  - wood anatomy, Indonesia 6407
- **Topography** (*see also* Aspect; Relief; Slopes)
  - botanical composition, plant succession, Japan 9014
  - broadleaves
    - increment, soil properties, USA 5235
    - pioneer species, plant morphology, Japan 8765
  - *Cryptomeria japonica,* salt spray, Japan, damage 4475
  - forest trees, wind damage, Japan, analysis 7035
  - mixed forests, botanical composition, aspect, Japan 6274
  - remote sensing, lasers 9641
  - savannas, soil, Mali 3922
  - thematic mapper, stand characteristics, Korea Republic 8742
  - wind, UK, measurement, methodology 2802
  - wind damage, mountain forests, Jamaica 1080
- **Topping,** *Pinus banksiana,* sex expression, plant nutrition, gibberellins 1318
- ***Toronia toru,*** wood anatomy, New Zealand 1213
- ***Torreya nucifera,*** insect pests, *Aspidiotus cryptomeriae,* Japan 9144
- ***Torreya taxifolia,*** forest decline, USA, ecology 7200
- **Tortricidae,** insect pests, *Quercus crispula,* seeds, Japan, damage 10037
- ***Tortrix viridana***
  - insect pests
    - broadleaves, Ukraine, parasitoids, *Trichogramma telengai* 1484
    - *Quercus pyrenaica,* Spain, control, nontarget effects 9197
    - *Quercus robur,* Poland, forest decline 1299
- ***Toumayella pini,*** insect pests, *Pinus taeda,* USA 7438
- **Tourism,** *Pinus sylvestris,* heathlands, agroforestry, France 5879
- **Tractors**
  - soil density, clear felling, USA, damage 2810
  - utilization, Italy 7796
- **Trade,** international trade, international agreements, intellectual property rights, biodiversity, India 9389
- **Trails,** damage, synecology, Canada 10135
- **Training**
  - agroforestry, education, conferences 5938
  - education, Bangladesh 4248
  - forest management, participation, community forestry, India 3358
  - forestry
    - communication, skills, rural development 8547
    - France 1641
    - India 9404
  - forestry workers, professional competence, Australia 6004
  - nature conservation, Germany 821
  - safety, private forestry, Germany 6003
  - seeds, multipurpose trees, handbooks 2533-2534
- ***Trametes pini*** (*see Phellinus pini*)
- ***Trametes versicolor*** (*see Coriolus versicolor*)
- **Translocation**
  - *Banksia prionotes,* plant nutrition, Australia 1288
  - forest trees, carbon dioxide enrichment, phloem, carbohydrates 7178
  - *Liquidambar formosana,* sap flow, water stress 4507
  - mycorrhizas
    - *Hebeloma crustuliniforme, Pinus ponderosa,* roots 4004
    - *Laccaria bicolor, Pinus ponderosa,* roots 4004
- **Transpiration**
  - *Alnus glutinosa,* nitrogen fixing trees, pruning, plant composition, growth 8096
  - amenity trees, water use, USA 8804
  - *Anacardium excelsum,* humidity, Panama 3614
  - *Betula occidentalis,* plant water relations, USA 8805
  - *Betula pendula,* carbon dioxide enrichment, temperature, seedling growth, photosynthesis 2997
  - broadleaves, stomata, photosynthesis, diurnal variation 456
  - *Cercis canadensis,* cuticle 5371
  - conifers
    - sap flow, Sweden 7061
    - temperature, carbon dioxide enrichment, simulation, measurement 1609
  - estimation
    - deciduous forests, hydrology, UK 3605
    - *Pinus halepensis,* water stress, sap flow, Israel 7947
    - techniques, mixed forests, climate, Czech Republic 3324
  - *Eucalyptus,* Australia 3596
  - *Eucalyptus globulus,* genetic variation, water stress, Portugal 1930
  - *Eucalyptus grandis*
    - photosynthesis, carbon dioxide enrichment 2086
    - simulation, methodology 3612
    - stockplants, light, quality, growth 5221
  - *Eucalyptus populnea,* sap flow, Australia, measurement 6813
  - *Fagus crenata,* stand characteristics, thinning, Japan 1927
  - *Fagus sylvatica*
    - foliage, carbon dioxide enrichment 1882
    - microclimate, leaf conductance, equations, Germany 9719
  - foliage, photosynthesis, simulation, equations 1620
  - *Myrica cerifera,* thicket, USA, simulation 8815
  - *Picea abies*
    - carbon dioxide enrichment, temperature, seedling growth, photosynthesis 2997
    - drought, plant water relations, photosynthesis, France 5279
  - *Picea rubens,* climatic factors, USA 8934
  - *Pinus pinaster,* carbon dioxide enrichment, water stress, interactions 1928
  - *Pinus ponderosa,* genetic variation, gas exchange, photosynthesis, North America 8198
  - *Pinus sylvestris,* climatic change, simulation, Sweden 4516
  - *Pinus taeda*
    - respiration, carbon dioxide, measurement 1272
    - stomata, light 7026
  - *Populus interamericana,* canopy, water uptake, USA 1932
  - *Prosopis glandulosa,* methodology 2491
  - *Pseudotsuga menziesii*
    - genetic variation, gas exchange, photosynthesis, North America 8198
    - increment, simulation, Canada 3000
  - *Psychotria horizontalis,* genotype environment interaction, precipitation, Panama 1880
  - *Quercus petraea*
    - carbon dioxide enrichment, water stress, interactions 1928
    - thinning, France, effects 7066
  - *Quercus pyrenaica,* canopy, leaf water potential, Spain 1933
  - *Quercus robur,* water deficit, Russia, meteorological factors 7064
  - regulation, broadleaves, canopy gaps, Panama 6302
  - *Salix matsudana,* leaf conductance 3598
- **Transpiration** *cont.*
  - *Salix viminalis,* roots, electrical phenomena in trees 455
  - *Thuja occidentalis,* drought, water stress, adaptation 5281-5282
  - tropical forests, evapotranspiration, Brazil, estimation 8378
- **Transplanting**
  - amenity trees
    - phenology, roots 5908
    - USA, survival, seasonal variation 5907
  - broadleaves
    - plant water relations, USA 5909
    - water stress, antitranspirants, defoliation 5286
  - *Magnolia grandiflora,* root pruning, USA, growth 3285
  - mechanization, Germany, damage 4979
  - *Phoenix roebelenii,* irrigation, water stress, defoliation 4981
  - *Quercus acutissima,* stems, pruning, growth 3773
  - *Sabal palmetto,* USA, survival, growth 7608
- **Transport,** road construction, costs, Japan, analysis 2720
- ***Treculia africana,*** species trials, agroforestry, soil properties, soil types, Nigeria 6868
- **Tree breeding** (*see also* Genetics)
  - *Acacia,* Sabah 9984
  - afforestation, plant physiology, vegetative propagation, Tropics 554
  - *Agathis dammara,* grafting, Indonesia 877
  - bamboos, *Bambusa pallida,* genetic variation, India 1433
  - biotechnology
    - Developing Countries, reviews 5474
    - India 7336
  - breeding programmes
    - *Cedrela odorata,* Cuba 1434
    - *Cryptomeria japonica,* Japan 8192
    - *Eucalyptus*
      - Chile 1435
      - pulpwood production, intensive silviculture, South Africa 553
      - vegetative propagation, pulpwood production, South Africa 552
    - experimental design, pollination; insects 3971
    - *Pinus*
      - provenance, Colombia 7348
      - pulpwood production, intensive silviculture, South Africa 553
      - vegetative propagation, pulpwood production, South Africa 552
    - *Pinus pinaster,* Australia 8196
    - *Pinus taeda*
      - genetic diversity
        - theory 7358
        - USA 7358
    - *Populus,* clones, species trials, India 577
    - progeny testing, selection criteria, *Pinus elliottii,* Zimbabwe 7351
    - *Quercus*
      - genetics
        - Europe, conferences 3306
        - North America, conferences 3306
    - *Robinia pseudoacacia,* frost resistance, Chile 7362
    - seedlings, clones, genetic variance, simulation 9967
    - *Triplochiton scleroxylon,* shoot cuttings, Nigeria, techniques 4284
  - broadleaves, clones, salt tolerance, waterlogging, Australia 3138
  - *Calliandra calothyrsus,* provenance, collection 2210
  - *Casuarina,* books 2448
  - conferences 7637, 9326
  - *Cryptomeria japonica*
    - Japan, selection criteria, inbreeding depression 9033

- **Tree breeding** *cont.*
  - *Cryptomeria japonica cont.*
    - provenance, Japan, classification 7344
  - *Cupressus,* wood properties, farm forestry, New Zealand 4830
  - *Dalbergia,* India 3140
  - early selection
    - *Abies fraseri,* Christmas trees, USA 3126
    - *Eucalyptus,* genetic variation, isoenzymes, increment 4839
    - *Picea abies*
      - phenology, increment 3132
      - plant physiology, increment 1423
    - *Picea mariana*
      - climatic change, Canada 3978
      - drought resistance, biomass, Canada 5477
      - increment, Canada 9042
    - *Pinus pinaster,* seedling growth, photoperiod, temperature 6429
    - *Pinus radiata,* basal area 8216
    - *Pinus sylvestris,* resins, yields 8200
    - *Pinus taeda*
      - USA, economics 3128
      - wood density, USA 1430
    - *Pseudotsuga menziesii,* genetic variation, seedling growth, USA 9968
    - *Quercus alba,* USA 6602
  - *Eucalyptus,* genetic improvement, conferences 4182
  - *Eucalyptus grandis,* wood properties, growth effects, South Africa 575
  - experimental design, statistical analysis 794, 2447
  - forest plantations, genetic diversity, reviews 8184
  - forest trees
    - biodiversity, conservation, Canada, research 3124
    - experimental design 25
    - genetics, Japan 1420
    - legislation, European Union 3966
    - South Africa 8190
    - tissue culture, genetic engineering 8189
    - vegetative propagation, economics, reviews 94
  - forests, biodiversity, afforestation, India 4969
  - fungal diseases, *Cronartium fusiforme, Pinus taeda,* USA 7346
  - genetic gain
    - *Pinus pinaster,* increment, France 3977
    - *Pseudotsuga menziesii,* increment, Canada 3135
  - genetic improvement, *Tectona grandis,* seedling growth, India 6593
  - genetic resources
    - Nicaragua, conservation 3969
    - population genetics, conservation, ethics 3308
  - genetic transformation
    - *Picea glauca,* pollen, embryos, techniques 2196
    - *Pinus radiata,* tissue culture 5503
    - *Populus kitakamiensis* 5537
    - *Populus tremuloides,* tissue culture 5560
  - genetic variation, seed orchards, simulation 555
  - *Grevillea robusta,* multipurpose trees, silviculture, agroforestry, conferences 2462
  - heritability
    - *Abies sachalinensis,* clones, Japan, wood properties 7118
    - selfing, inbreeding depression, dominance, simulation 2171
  - history, Germany 4230
  - ideotypes, reviews 9027
  - inheritance, *Cryptomeria japonica,* flowers, male sterility 4831
  - *Juglans nigra,* multipurpose trees, NPK fertilizers, USA 9055
  - *Larix,* Germany 4230
  - multipurpose trees, choice of species, selection criteria, research, West Africa 8186

- **Tree breeding** *cont.*
  - phenotypic selection
    - *Juglans regia,* genetic improvement, Italy 6031
    - *Pinus sylvestris,* plus trees, crown, Finland 7345
    - *Terminalia,* India 6601
  - *Pinus,* phenotypic selection, genetic gain 9049
  - *Pinus banksiana*
    - increment, statistical analysis, Canada 794
    - wood properties 8201
  - *Pinus radiata,* genetic variation, New Zealand 4825
  - *Pinus sylvestris*
    - afforestation, spacing, Sweden 9974
    - Germany 4230
    - seed orchards, pollination, Sweden 5500
  - *Pinus taeda*
    - pollen, induction, techniques 9876
    - tissue culture, reviews 7737
  - ploidy, *Cryptomeria japonica,* gas exchange, plant morphology 7186
  - plus trees, progeny testing, *Pinus sylvestris,* Russia 9043
  - polyploidy, *Morus atropurpurea,* China 7373
  - *Populus,* plant morphology, genetic variation, China 593
  - progeny testing
    - *Abies holophylla,* heritability, Korea Republic 8205
    - *Acacia mangium,* inheritance, Indonesia 2205
    - artificial selection, *Picea abies,* provenance trials, Poland 2179
    - *Betula pendula,* phenology, growth rate, Finland 9980
    - computer techniques, experimental design 8188
    - *Cupressus sempervirens,* pollination 5510
    - *Dalbergia sissoo,* seeds, quality, India 9064
    - early selection
      - *Abies sachalinensis* 8211
      - *Eucalyptus grandis,* increment, Colombia 2225
      - forest trees, France, statistical analysis 1419
      - *Prosopis cineraria,* plant morphology, India 2209
    - *Eucalyptus,* genetic variation, frost resistance, Australia 8241
    - *Eucalyptus camaldulensis*
      - Australia, essential oils 6018
      - genetic gain, essential oils, Zimbabwe 2201
      - provenance trials, Chile 6028
    - *Eucalyptus deglupta*
      - foliage, Costa Rica 9985
      - height, Costa Rica 9985
    - *Eucalyptus globulus,* provenance trials, genetic variation, Chile 8237
    - *Eucalyptus urophylla,* genetics, plant morphology, Indonesia 2204
    - genetic gain, forest trees, plus trees 2177
    - heritability
      - genetic gain, *Gmelina arborea,* Peninsular Malaysia 7363
      - methodology 3123
      - *Pinus pinaster,* increment, France 5496
    - *Lagerstroemia speciosa,* genetic variation, India 9057
    - *Larix*
      - Russia 5492
      - USA 4254
    - *Picea abies*
      - frost resistance
        - Norway 8210
        - phenology, Norway 568
      - genetic variation, heritability, Finland 9972
      - Slovenia 5476
    - *Pinus contorta,* genetic variation, Sweden 1431

- **Tree breeding** *cont.*
  - progeny testing *cont.*
    - *Pinus densiflora,* genetic variation, genetic gain, Korea Republic 8204
    - *Pinus elliottii,* USA, disease resistance, *Cronartium fusiforme* 2188
    - *Pinus patula*
      - genetic variation, Mexico 566
      - genetics, heritability, Zimbabwe 557
      - wood density
        - Belize 3979
        - Colombia 3979
      - wood properties, South Africa 1425
    - *Pinus rigida,* increment, height, USA 4832
    - *Pinus sylvestris*
      - Christmas trees, USA 2668
      - frost resistance 3131
      - heritability, Finland 9973
      - sampling, Finland 7674
    - *Pinus wallichiana,* Romania 5490
    - *Prosopis,* species trials, biomass production, USA 3137
    - *Pseudotsuga menziesii,* wood properties, shrinkage, Canada 3984
    - *Pterocarpus indicus,* genetic variation, plus trees, Indonesia 6595
  - *Pseudotsuga menziesii,* wood density, phenology, USA 4829
  - resistance, fungal diseases, *Ceratocystis fagacearum, Quercus virginiana,* USA 1457
  - *Salix,* short rotation forestry, biomass production, Finland 5522
  - seed orchards
    - computer techniques, experimental design 556
    - genetic improvement, genetic erosion 9966
  - selection criteria
    - *Cupressus sempervirens,* resistance, *Seiridium cardinale* 5512
    - *Eucalyptus,* water stress 6306
    - France 9025
    - ideotypes, *Pinus sylvestris* 7353
    - *Pinus,* genetic variation, France, silvicultural characters 9035
    - *Pinus koraiensis,* site factors, Korea Republic 8206
    - *Populus trichocarpa,* morphology, fungal diseases, resistance 3999
    - *Prunus avium,* seed orchards, France 5521
    - *Quercus petraea,* shoot cuttings, branching, plant morphology 5374
    - *Terminalia arjuna,* genetic variation, India 580
  - shelterbelts, Canada, broadleaves 3967
  - *Tectona grandis*
    - seed orchards, budding, Peninsular Malaysia 7742
    - tissue culture, micropropagation, India 2598
  - tissue culture, India 6044
  - *Ulmus,* reviews, disease resistance, *Ophiostoma ulmi* 5565
  - wood anatomy, cell walls, reviews 3985
- **Tree classes,** broadleaves, USA, bottomland forests 9575
- **Tree guards**
  - amenity trees 742
  - broadleaves, seedling growth, Australia 5129
  - *Gymnocladus dioica*
    - forest nurseries
      - increment, USA 442
      - plant water relations, USA 442
  - marsupials, *Wallabia bicolor, Eucalyptus regnans,* damage 6691
  - *Picea abies,* artificial regeneration, direct sowing, Italy 6114
  - *Prunus avium,* photosynthesis, water use efficiency 4689
  - *Quercus rubra*
    - artificial regeneration, USA 8625
    - planting, USA 937

- **Tree guards** *cont.*
  - *Quercus rubra cont.*
    - USA, shoots, growth 3431
- **Tree injection,** nutrients, street trees, plant nutrition, soil air, UK 10143
- **Treelines**
  - *Betula pubescens*
    - Russia, distribution 7263
    - Scandinavia, distribution 7263
  - climatic change, monitoring 7866
  - conifers, dendrochronology, dieback, Switzerland 6762
  - forest influences, energy balance, Canada 3693
  - forest trees
    - forest fires, global warming, Canada 3700
    - grazing
      - climate
        - Russia 7277
        - Scandinavia 7277
    - India 1356
  - *Larix lyallii,* dendrochronology, Canada 10162
  - *Nothofagus,* global warming, New Zealand 526
  - *Picea abies*
    - Russia, distribution 7263
    - Scandinavia, distribution 7263
  - *Picea mariana*
    - climatic change, Canada, history 2127
    - increment, stem form, Canada 2688
    - vegetation, history, Canada 514
  - *Pinus sylvestris,* growth, photosynthesis, altitude, UK 2807
  - *Prumnopitys ferruginea,* global warming, New Zealand 526
  - stand structure, botanical composition, Korea Democratic People's Republic 8993
  - tropical forests, Ethiopia, reviews 3917
  - USA 3894
- **Trees,** sap flow, measurement, techniques, theory 3601
- ***Trema guineensis***
  - seedlings
    - photosynthesis, light 3010
    - respiration, light 3010
- ***Trema micrantha***
  - Brazil 9898
  - seedlings
    - light, canopy gaps, crown, Mexico 7023
    - morphology, identification, secondary forests, Peru 6431
- ***Trema orientalis***
  - Indonesia, wood chemistry 2059
  - tissue culture, organogenesis 4281
- ***Trema tomentosa,*** photosynthesis, Singapore 6467
- ***Trewia nudiflora,*** wood anatomy 401
- ***Tribolium castaneum***
  - insect pests
    - *Ceratonia siliqua,* chemical control 5781
    - *Juglans regia,* chemical control 5781
- ***Trichilia clausseni,*** flora, Brazil 7245
- ***Trichilia dregeana,*** seed crops, rural economy, Zimbabwe 195
- ***Trichilia elegans,*** flora, Brazil 7245
- ***Trichilia emetica***
  - seed crops, rural economy, Zimbabwe 195
  - vegetation types, climate, landscape, Kenya 2156
- ***Trichilia luciae,*** taxonomy, Brazil 9894
- ***Trichoderma harzianum,*** enzymes, fungal diseases, forest trees, biological control 7409
- ***Trichoscyphella willkommii,*** fungal diseases, *Larix decidua,* resistance, testing 5642
- ***Trichosurus caninus***
  - marsupials
    - Australia
      - simulation
        - forest fragmentation 8363-8364
        - population dynamics 8363
        - population genetics 8364
- ***Trichosurus vulpecula***
  - mammals, *Metrosideros excelsa,* New Zealand, damage 4075
  - marsupials
    - forest trees, remote sensing, New Zealand, damage 471
    - forests, New Zealand, control, water pollution 1506
- ***Trigonopleura malayana,*** wood anatomy 414
- **Trinidad and Tobago**
  - *Clusia minor,* photosynthesis, carbon pathways, seasonal variation 4714
  - *Pinus caribaea,* forest plantations, research 953
- ***Triplochiton scleroxylon***
  - breeding programmes, shoot cuttings, Nigeria, techniques 4284
  - forest plantations
    - forest borders
      - increment
        - Cameroon 4594
          - equations 5013
- ***Triplostemon cymosum,*** stem form, buttresses, plant competition, Papua New Guinea 3876
- **Tristan da Cunha,** *Phylica arborea,* natural regeneration, site factors 3837
- **Tropical forests** (*see also* Vegetation types, tropical forests)
  - birds, seed dispersal, Indonesia 1403
  - broadleaves, light, plant physiology 6259
  - canopy gaps
    - characteristics, Côte d'Ivoire 1334
    - ground vegetation, cycling, India 4785
    - stand development, French Guiana 6570
  - *Celaenodendron mexicanum,* species diversity, Mexico 2146
  - Chiroptera, seed dispersal, Indonesia 1403
  - choice of species, introduced species 6015
  - cycling
    - periodicity, reviews 4532
    - reviews 4537
  - deforestation
    - biodiversity 6719
    - climatic change, simulation 3557
    - forest economics, books 2449
    - forest management
      - sustainability
        - Asia, conferences 6801
        - Australia, conferences 6801
    - forest policy, economics 5863
    - natural regeneration
      - land use 1415
      - remote sensing, carbon dioxide 1047
  - degraded forests
    - reclamation
      - Asia, conferences 2479, 3232, 3245
      - Oceania, conferences 2479, 3232, 3245
    - rehabilitation, Tropics, conferences 18
  - elephants, *Loxodonta africana,* canopy gaps, Gabon 684
  - environmental degradation, roads 4941
  - epiphytes, arthropods, Mexico, interactions 6561
  - foliage, development, nitrogen, Panama 315
  - forest ecology, Panama, books 5932
  - forest inventories, sample plot technique 3507
  - forest management
    - sustainability 1012
      - Africa 6206
      - methodology 6207
  - forest resources, deforestation, timber trade 5860
  - forest trees
    - roots, morphology, mycorrhizas, French Guiana 4640
    - stems, water storage, Costa Rica 4521
  - Formicidae, sampling, Costa Rica 21
  - fruiting, estimation, Uganda 2489
  - history, Latin America, books 4150
- **Tropical forests** *cont.*
  - hunting
    - Ecuador, small mammals 5814
    - forest management, Bolivia 5813
    - nature conservation, deforestation, Peru 5812
    - Peru, sustainability 5816
  - hurricanes, Puerto Rico, damage 1892
  - increment, logging, Brazil, regrowth 6180
  - irrigation, Panama, insects 2123
  - landscape ecology, remote sensing, Guatemala 6997
  - light penetration, French Guiana, simulation 4214
  - lizards, *Xenosaurus grandis,* Mexico, ecology 6696
  - mortality, Venezuela 3122
  - natural regeneration, hurricanes, Guadeloupe 4796
  - nature conservation
    - biodiversity 6837
    - deforestation 5891
    - forest management, sustainability, Developing Countries 5857-5858
    - Malaysia 5895
  - nature reserves, conservation, Nigeria, agricultural development 7602
  - palaeoecology
    - Panama, prehistoric agriculture 4761
    - pollen analysis
      - Africa 3067
      - South America 3067
  - phenology, flowering, classification 2928
  - photosynthesis, carbon dioxide, stable isotopes 2999
  - planting, logging, greenhouse effect, control, Sabah 6254
  - pollination, flowers, morphology 3036
  - remote sensing
    - classification, Brazil 6225
    - image processing 2768
    - radar, land use, forest resources 262
    - radiometry, Africa, mapping 6230
  - reproductive behaviour, phenology, India 2102
  - research, rain forests 2144
  - root systems, carbon cycle, plant water relations, Brazil 4085
  - roots, wind damage, cycling, Puerto Rico 3562
  - seed dispersal, wind damage, Puerto Rico 1335
  - species diversity, environmental factors 5447
  - stand characteristics, population dynamics 3958
  - stand structure, botanical composition, simulation 4215
  - synecology
    - botanical composition, Sri Lanka 1368
    - flooding, Brazil 1367
  - understorey, forest inventories, Ghana, surveys, techniques 4441
  - ungulates, seed dispersal, seed predation, Peru 685
  - wildlife
    - seed dispersal, reviews 3868
    - sustainability, hunting, measurement 697
- **Tropics**
  - *Acacia,* biology, utilization, multipurpose trees, research 185
  - afforestation, tree breeding, plant physiology, vegetative propagation 554
  - agroforestry 1564
    - books 750
    - conferences 9324
    - handbooks 8471
    - land use 9279
      - sustainability 3270
    - shifting cultivation, carbon cycle, soil organic matter, reviews 8427
    - soil fertility, plant competition, simulation 4107
  - biodiversity, forest management 4975
  - community forestry, forest management, resource management, bibliographies 6795

- **Tropics** *cont.*
  - deforestation
    - control, shifting cultivation 4102
    - forests, conservation 4106
    - timber trade, trade sanctions, forest policy, simulation 4956
  - Fabaceae, nitrogen fixation, root nodules, reviews 6320
  - forest fires, air pollution, emission 385
  - forest influences, atmosphere, precipitation, simulation 9759
  - forest management, sustainability, forest plantations 6159
  - forest trees
    - biology, agriculture, silviculture, reviews 9372
    - flowering, induction, reviews 8955
    - planting, books 5933
  - forests, cycling, soil chemistry, forest litter 3634
  - fungal diseases, *Acacia nilotica,* damage 10031
  - insect pests, *Acacia nilotica;* damage 10031
  - land use, forestry 1545
  - mangrove forests
    - biomass production, forest litter, latitude 3899
    - projects, private organizations 1358
  - mixed forests, growth models, books 1595
  - nature conservation
    - biodiversity
      - books 752
      - conferences 752
    - development projects 9299
  - rain forests
    - forest ecology, canopy, research 536
    - natural regeneration, species diversity, reviews 7326
    - soil chemistry, silicon 8778
  - savannas, forest borders, books 4165
  - soil chemistry, carbon, estimation, techniques 5008
  - tropical forests, degraded forests, rehabilitation, conferences 18
  - vegetation, atmosphere, precipitation, simulation 9759
  - wetlands, projects, private organizations 1358
- **Truffles**
  - production
    - economics
      - *Corylus avellana,* forest plantations, Spain 1807
      - *Quercus,* forest plantations, Spain 1807
  - voles, *Clethrionomys californicus, Pseudotsuga menziesii,* USA 7521
- ***Tryblidiopsis pinastri,*** fungal diseases, conifers 4169
- ***Trypodendron lineatum***
  - insect pests
    - *Pseudotsuga menziesii*
      - USA 7478
        - attractants 4893
- ***Tsuga***
  - understorey, volcanoes, USA, damage 539
  - wind damage, Netherlands 1062
  - wood anatomy, parenchyma 4625
- ***Tsuga canadensis***
  - dwarfism, seedlings, morphogenesis 6397
  - forest ecology, land use, USA, history 717
  - forest litter, soil fauna, USA 1924
  - insect pests
    - *Lambdina fervidaria,* USA 2330
    - *Lambdina fiscellaria,* Canada, pheromones 5705
  - light, soil water, increment, USA 5181
  - plant water relations, dielectric properties 785
  - remote sensing, reflectance, USA 1046
  - shoots
    - morphology 2934
    - optical properties 1059
  - soil chemistry, nitrogen, foliage, chemistry, USA 3576
  - stand structure, USA, age 4799
- ***Tsuga canadensis*** *cont.*
  - wildlife
    - birds, herbicides, Canada 5829
    - *Microtus pennsylvanicus,* plant succession, USA 5811
- ***Tsuga chinensis,*** mycorrhizas, Taiwan 3158
- ***Tsuga diversifolia,*** soil air, carbon dioxide, snow cover, Japan 8768
- ***Tsuga dumosa,*** cloud forests, synecology, altitude, land use, Nepal 1371
- ***Tsuga heterophylla***
  - air pollution, forest economics, Canada, growth 4557
  - clear felling
    - forest borders, USA, stand characteristics 1333
    - soil properties, understorey, Canada 3585
  - climate, stand characteristics, population dynamics, simulation, Canada 7332
  - dead wood, decomposition, USA 4497
  - fishes, water quality, forest ecology, USA 2170
  - foliage, biochemistry, seasonal variation, USA 1281
  - forest fires, plant succession, USA 7136
  - forest litter
    - decomposition
      - Canada, nitrogen, availability 7912
      - hydrology, USA 7897
    - nitrogen, mineralization, Canada 6288
    - respiration, USA 4496
  - forest plantations, weed competition, *Gaultheria shallon,* Canada, growth 9514
  - fungal diseases, *Armillaria ostoyae,* thinning, USA 10008
  - genetic transformation, biolistics 6591
  - growth rings, wood density, USA 1178
  - humus, mineralization, fertilizers, Canada 6289
  - mixtures, site class assessment, yield forecasting, Canada 5177
  - mycorrhizas
    - forest ecology, USA 6610
    - host specificity 5603
    - *Rhizopogon,* host specificity 5602
    - rhizosphere, protozoa 5606
  - natural regeneration, thinning, USA 928
  - nitrogen fertilizers, plant composition, seasonal variation 1281
  - respiration, USA 5412
  - seedlings, light penetration, plant morphology, plant physiology, adaptation 6258
  - shoots, structure, photosynthesis, light, carbon dioxide 8109
  - site class assessment, soil chemistry, plant composition, Canada 8776
  - site preparation, Canada, weed control, *Rubus parviflora* 163
  - soil bacteria, seed inoculation, seed germination, seedling growth 6085
  - soil chemistry, site class assessment, USA 1903
  - soil organic matter, mixing, Canada, nutrients 6278
  - soil water, measurement, time domain reflectometry, USA 9688
  - spacing, USA, branches, diameter 4350
  - stand characteristics, plant competition, yield tables, simulation 6827
- ***Tsuga mertensiana***
  - climate, stand characteristics, population dynamics, simulation, Canada 7332
  - cones, climate, increment, USA 2098
  - fungal diseases, *Armillaria ostoyae,* thinning, USA 10008
  - plant succession, seral stages, increment, USA 4792
- ***Tsuga sieboldii,*** secondary forests, plant succession, Japan, age structure 4325
- ***Tuber***
  - edible fungi
    - forest plantations, Sardinia 6158
    - *Quercus suber,* Sardinia 207
  - mycorrhizas, *Corylus avellana,* irrigation 5613
- ***Tuber brumale,*** mycorrhizas, *Corylus avellana,* irrigation 5613
- ***Tuber magnatum***
  - edible fungi, soil properties, Italy 987
  - mycorrhizas
    - broadleaves
      - interface, ultrastructure 4001
      - Italy 6609
    - *Corylus avellana,* polyphenols 6611
- ***Tuber melanosporum***
  - edible fungi, *Corylus avellana,* mycorrhizas, biological competition 5575
  - mycorrhizas, *Corylus avellana,* irrigation 5613
- ***Tuber nigrum,*** mycorrhizas, *Corylus avellana,* polyphenols 6611
- ***Tuber uncinatum***
  - mycorrhizas
    - broadleaves, interface, ultrastructure 4001
    - *Corylus avellana,* polyphenols 6611
- **Tumours**
  - anatomy, *Populus tremuloides,* Canada 8116
  - *Pinus densiflora,* wood anatomy 397
- **Tunisia,** multipurpose trees, planting, rangelands, soil types 8420
- ***Tupidanthus calyptratus,*** wood anatomy 8068
- ***Turdus,*** birds, *Juniperus thurifera,* seed dispersal, Spain 2387
- **Turkey**
  - broadleaves, foliage, texture, plant nutrition 1224
  - insect pests
    - *Eulecanium transvittatum, Acer negundo* 7435
    - *Matsucoccus josephi, Pinus* 2315
  - land use, multiple use, conferences 6804
  - *Pinus nigra,* population genetics 8212
  - *Pinus sylvestris,* genetic variation, population genetics 572
  - pollen, botanical composition 8124
- **Turkmenistan**
  - afforestation, desertification, Arid Regions 2405
  - vegetation types, flora, books 5919
- ***Turpinia,*** taxonomy, Borneo 7228
- **Turtles,** *Rhinoclemmys,* vegetation types, seed dispersal, Costa Rica 6515
- ***Tylenchorhynchus indicus,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Tylenchulus semipenetrans,*** plant parasitic nematodes, *Cunninghamia lanceolata,* soil properties, China 5775
- ***Tylospora,*** mycorrhizas, *Picea abies,* enzymes 9993
- **Tyres,** site preparation, forestry machinery, Canada 4366
- ***Uapaca kirkiana,*** savanna woodlands, phenology, plant nutrition, Zambia 6308
- ***Uapaca nitida,*** savanna woodlands, phenology, plant nutrition, Zambia 6308
- **Uganda**
  - *Acacia,* weed control, controlled burning, grasslands 5362
  - *Albizia coriaria,* agroforestry, indigenous knowledge, theses 9282
  - degraded forests, detection, methodology 8414
  - *Encephalartos equatorialis,* taxonomy, new species 9900
  - *Ficus natalensis,* agroforestry, indigenous knowledge, theses 9282
  - mountain forests, ethnobotany 7798
  - nature conservation, development projects 9299
  - primates, rain forests, forest management, nature reserves 4057
  - tropical forests, fruiting, estimation 2489
  - wildlife, tropical forests, seed dispersal 8953
- **UK**
  - abiotic injuries, amenity trees, books 6
  - *Acer pseudoplatanus*
    - agroforestry, sheep, birds, ecology 6725
    - air pollution, forest litter, decomposition 4572
    - choice of species, nature conservation, reviews 10125

- **UK** *cont.*
  - *Acer pseudoplatanus cont.*
    - rhizosphere, soil biology, enzymes, root systems 5274
    - woodlands, soil pollution, heavy metals 8855
  - acid deposition, water pollution, surveys, forest influences, simulation 3677
  - afforestation
    - agricultural land, land use, policy 7694
    - forest economics, simulation 3531
    - forest influences, streams, chemistry, soil chemistry 10083
    - forest management, land use 6204
  - agroforestry, *Sus scrofa* 3264
  - *Ailanthus altissima,* sap, allergens 6863
  - *Alnus glutinosa,* forest nurseries, soil sterilization 2620
  - amenity trees
    - buildings, foundations, damage, reviews 7609
    - clay soils
      - buildings
        - databases 10146
        - foundations 10145
    - planting
      - planning
        - urban areas
          - standards 10139
          - surveys 10139
    - root systems, interactions, building construction, standards 10140
  - amenity value of forests, buildings, valuation 9374
  - arboriculture, spades, surveys 9552
  - bacterial diseases, amenity trees, books 6
  - bamboos, *Himalayacalamus hookerianus,* taxonomy, ornamental woody plants 8453
  - *Betula,* autecology 386
  - *Betula pendula*
    - root systems, genetic variation 1439
    - shoots, vegetative propagation, habit 410
    - thinning, stems, quality, wood properties 9519
    - wood anatomy, development, growth effects 1988
  - birds
    - *Columba palumbus,* farm woodlands, hedges, control 1509
    - ecology, hedges, land use, species diversity 8369, 8372
    - *Falco columbarius,* forest influences 5825
    - forestry, land use, species diversity 6689
    - *Tetrao urogallus*
      - forest management 4929
      - *Pinus sylvestris* 688
  - bottomland forests, reclamation, water management 10081
  - broadleaves
    - canopy, reflectance, seasonal variation 6224
    - foliage, enzymes, isoenzymes, seasonal variation 3770
    - forest litter, streams, fauna 5252
    - natural regeneration
      - seed germination, viability 4750
      - seed production, seed predation 3031
      - vs. artificial regeneration, history 2625
    - phenology, history 6393
    - planting stock 2635
    - reclamation
      - landfills
        - species trials 4947
          - plant nutrition 4948
      - mine spoil, soil amendments 6708
  - *Castanea sativa,* silviculture 6943
  - climatic change, environmental policy, books 267
  - community forestry, valuation 729
  - coniferous forests, logging, water quality, streams 8020
  - conifers
    - afforestation, soil chemistry 5353
- **UK** *cont.*
  - conifers *cont.*
    - air pollution
      - foliage
        - leaching 4560
        - microbial flora 4570
        - nutrients 4559
      - fumigation equipment 4189
      - growth 4558
      - metabolism 4562
      - research 4574
    - foliage, plant nutrition, air pollution 6453
    - nature conservation, arboreta 6758
    - watersheds
      - hydrology, research 702
      - soil amendments, lime, soil chemistry 3414
  - deciduous forests 7297
    - carbon cycle, radiocarbon dating 4534
    - forest litter, Basidiomycotina, cycling 9713
    - *Quercus*
      - forest litter 7904
        - decomposition 7905
    - transpiration, estimation, hydrology 3605
  - deer
    - *Cervus elaphus, Pinus sylvestris,* grazing effects, forest ecology 2392
    - *Muntiacus reevesi,* habitats, spread 10073
  - draught animals, forestry 5121
  - *Fagus sylvatica*
    - pollarding, growth, mortality 5151
    - precipitation, air pollution, hydrology 3670
  - farm forestry
    - community forestry 4124
    - short rotation forestry, fuel plantations, books 7623
  - fens, synecology, foliage, morphology 3898
  - fertilizers, sewage sludge, legislation 8593
  - forest ecology, seed banks 3831
  - forest economics, private forestry, surveys 4462
  - forest health, geographical information systems 8938
  - forest influences, streams, nitrogen 8025
  - forest management
    - biodiversity, nature conservation 4998
    - planning, forest policy 2714
    - wind damage 6273
      - classification 6265
  - forest plantations
    - age, basal area, streams, nitrate 8864
    - carbon cycle 4315
  - forest policy 41
    - forest administration 5028
    - forest management 8522
      - conferences 8482
  - forest recreation, surveys, traffic 2429
  - forest trees
    - books 6786
    - dendroclimatology 7615
    - exotics 5003
    - foliage, nitrogen, nutrient allocation 1944
    - forest health, forest decline 6501
    - forest nurseries, herbicides, tolerance 2644
    - herbicides, tolerance 2645
    - natural regeneration, surveys 5440
    - nature conservation, arboreta 5003
    - reproductive behaviour, crown, forest decline 3033
    - vegetation types, history 510
  - forestry 9373
    - forest policy 2516
  - forests, valuation, nature conservation, computer techniques 5892
  - *Fraxinus excelsior,* silviculture 4365
  - fungal diseases
    - amenity trees, books 6
    - *Endocronartium pini, Pinus,* inoculation, infection 9119
- **UK** *cont.*
  - fungal diseases *cont.*
    - *Heterobasidion annosum*
      - *Picea,* resistance 4571
      - *Picea sitchensis* 2263
        - control, economics 3169
      - *Pinus sylvestris,* damage 9099
    - *Melampsora*
      - *Salix burjatica* 2276
      - *Salix viminalis* 5647
    - *Ophiostoma, Ulmus,* disease vectors 5633
    - *Phytophthora cambivora, Alnus,* distribution 3164
    - *Ramichloridium pini, Pinus contorta* 2270
    - *Taphrina betulina*
      - *Betula pubescens* 5662
        - increment, witches' brooms 5663
  - heathlands 7297
  - hedges
    - agriculture, conservation, conferences 7643
    - species diversity 5848
  - insect pests
    - *Alnetoidia alneti,* broadleaves 5690
    - amenity trees, books 6
    - Aphididae, *Picea abies,* roots, air pollution 4573
    - *Coleophora serratella, Betula,* interactions 2320
    - Cynipidae, *Quercus* 6662
    - *Elatobium abietinum*
      - *Picea sitchensis*
        - fertilizers 2612
        - growth 3178
    - *Eriocrania, Betula,* interactions 2320
    - *Hylobius abietis, Picea sitchensis,* damage 2353
    - *Phyllonorycter platani, Platanus,* spread 7460
    - *Pityophthorus lichtensteini, Pinus* 5741
    - *Prays fraxinella*
      - *Fraxinus excelsior* 5707
        - feeding behaviour, dieback 8334
    - *Pulvinaria regalis,* amenity trees, biology 5697
    - Scolytidae, legislation, surveys 3184
    - *Scolytus, Ulmus,* disease vectors 5633
    - *Taxomyia taxi, Taxus baccata,* population dynamics, parasitoids 2368
    - *Zeiraphera diniana, Pinus contorta* 7453
  - *Juglans,* site requirements, provenance trials 2543
  - *Juglans regia,* planting stock, treatment, growth 5125
  - landscape, forests, history 5903
  - *Larix eurolepis,* agroforestry, sheep, birds, ecology 6725
  - legislation, forestry, waste disposal 2892
  - *Lupinus arboreus,* biomass production, agroforestry, nurse trees, defoliation 3478
  - mycorrhizas
    - *Laccaria proxima, Picea sitchensis,* fertilizers, forest nurseries 906
    - *Paxillus involutus, Betula pendula,* reclamation 4096
    - succession, *Pinus sylvestris* 8280
  - national forests, land use planning, multiple use 6748
  - *Picea*
    - air pollution, fungal diseases, resistance 4571
    - soil chemistry, weathering 1904
  - *Picea abies*
    - air pollution
      - foliage, wettability 4563
      - insect pests 4573
      - plant physiology 4561
    - provenance, frost resistance, foliage, air pollution 9679
  - *Picea sitchensis*
    - acid deposition, frost resistance, assessment 5317

UK *cont.*

- *Picea sitchensis cont.*
  - afforestation
    - peatlands, carbon cycle 2633
    - wetlands, streams, water quality 4081
  - air pollution
    - deposition, snow 333
    - ozone, canopy, deposition 7987
    - salt spray, streams, water quality 7874
    - soil chemistry, plant water relations, nitrates 5243
    - throughfall, soil chemistry, nitrates 5242
  - buds, phenology, carbon dioxide enrichment, temperature 2008
  - clear felling
    - hydrology 5830
    - soil chemistry 7127
    - watersheds, aluminium 353
  - fertilizers
    - sewage, groundwater, quality 895
    - tree injection 2613
  - forest influences, streams, chemistry, acid deposition 8868
  - forest plantations
    - forest influences, soil chemistry 360
    - streams, pH 354
  - geographical information systems, site class assessment 5180
  - nitrogen fertilizers, *Elatobium abietinum* 2612
  - plant nutrition
    - phosphorus, seasonal growth 7959
    - sewage 895
    - whole tree logging, productivity 1136
  - rhizosphere, soil biology, enzymes, root systems 5274
  - rotations, growth, whole tree logging 6110
  - silvicultural systems, wood properties 6133
  - spacing
    - air flow, canopy 8014
    - growth effects, wood properties 2655
  - stem form, increment, mortality 9576
  - stems, mechanics, wind damage 6272
  - wind, turbulence, stems, mechanics 6271
  - wind damage, fertilizers 3564
  - yield forecasting, simulation 2694
- *Pinus nigra,* volume determination, remote sensing, radar, statistical analysis 3519
- *Pinus peuce,* seed germination, seedling growth, plant nutrition, forest nurseries 9469
- *Pinus sylvestris*
  - climate, plant morphology, water stress 5222
  - coniferous forests, climatic change 2794
  - cycling, sulfur, air pollution, methodology 3629
  - dendrochronology, bogs 9315
  - foliage, shedding, forest health 1301
  - growth, photosynthesis, altitude, treelines 2807
  - nature conservation 5893
  - soil chemistry, weathering 1904
  - synecology, ground vegetation, lichens 1359
- plant parasitic nematodes, amenity trees, books 6
- *Platanus acerifolia,* street trees, salt injury 346
- pollen analysis
  - deforestation, vegetation, history 4763
  - palaeoecology, vegetation, history 3062
- *Populus,* yield tables 4416
- *Populus nigra* 5366
- *Populus tremula*
  - choice of species, silviculture, utilization, reviews 9546
  - geographical distribution, autecology, genetic variation 7142

UK *cont.*

- *Prunus,* nitrogen fertilizers, irrigation, forest nurseries 4311
- *Quercus ilex,* water stress, distribution 3610
- *Quercus petraea,* provenance trials, phenology, frost resistance 9412
- *Quercus robur*
  - conifers, nurse trees 5155
  - earlywood, latewood, cellulose, metabolism 9853
  - mixtures, growth, *Larix decidua, Picea abies* 5155
  - seed production, predation, natural regeneration, recruitment 9023
- reclamation, landfills, classification 6710
- remote sensing
  - image interpretation
    - forests, classification 2760
    - land use 4447
- riparian forests, riverbanks, erosion, mechanics 4086
- rodents, *Picea sitchensis,* forest plantations 7542
- root nodules, *Frankia, Alnus glutinosa,* soil inoculation 2620
- *Salix*
  - branches, lichens, morphology, physiology 8169
  - coppice, foliage, demography 6097
  - silviculture, plant introduction 6148
- silvicultural systems
  - selection system, books 6778
  - yields 6091
- silviculture, spades, surveys 9552
- soil chemistry, acidification, air pollution, simulation 7683
- squirrels
  - *Sciurus,* forest trees, competitive ability 2389
  - *Sciurus vulgaris,* feeding behaviour 2391
- street trees, plant nutrition, tree injection, nutrients, soil air 10143
- *Tilia cordata,* water stress, distribution 3610
- urban forestry, development projects 8454
- vegetation, palaeoecology, pollen analysis 8145
- vegetation types
  - land use, mapping, change 8735
  - remote sensing, simulation 7850
- veteran or remarkable trees 6160
- viral diseases, amenity trees, books 6
- virgin forests, nature conservation 735
- watersheds, hydrology, forest influences, streams 2906
- weed control, nurseries, ornamental woody plants 1730
- wildlife, woodlands, nature conservation 3277
- wind, topography, measurement, methodology 2802
- witches' brooms, *Betula pubescens* 5662
- woodlands
  - afforestation, land use, books 6776
  - guide books 8449
  - nature conservation, reviews 10124
  - synecology, layer structure, forest management 10149
- woody plants, air pollution, susceptibility 3651

Ukraine

- afforestation, mine spoil, soil toxicity 10091
- *Betula pendula*
  - fallout, uptake 1954
  - ionizing radiation, damage, seed germination 7979
- broadleaves, soil biology, algae, forest steppe 1106
- conifers, isoenzymes, gene mapping 9044
- fallout, forestry 9408
- forest recreation, hydrology, damage 4976
- insect pests
  - *Rhyacionia buoliana, Pinus,* population dynamics 7450-7451

Ukraine *cont.*

- insect pests *cont.*
  - *Tortrix viridana,* broadleaves, parasitoids, *Trichogramma telengai* 1484
- mixtures, forest plantations 1783
- *Pinus sylvestris*
  - forest management, site class assessment 5185
  - genetic variation, isoenzymes, gene flow 571
  - increment, fallout 4548
  - isoenzymes, radiation 5484
- pollution
  - fallout
    - forest fires 9736
    - forest influences, forestry workers 8829
- *Quercus robur*
  - mixtures, silviculture 1785
  - silviculture 2661
- radionuclides
  - fallout
    - soil pollution 5308
    - spread 6327
- site preparation, contour ridging 938
- *Vaccinium vitis-idaea,* flowering 481

Ulex densus, forest fires, simulation, Portugal 7132

Ulex europaeus

- energy value, seasonal variation, forest fires, fire danger, Spain 9773
- weed control, herbicides, uptake, surfactants 8638
- woody weeds, New Zealand, biological control 8636

Ulmaceae, geographical distribution 1350

Ulmus

- bacterial diseases, Russia, Kazakhstan 10018
- control, woody weeds, herbicides, USA 1767
- fungal diseases
  - *Ophiostoma,* Europe, spread 8299
  - *Ophiostoma novo-ulmi,* pathogenicity 4018
  - *Ophiostoma ulmi*
    - Australia 4980
    - biological control 10023
    - France, spread, damage 4019
    - resistance, tree breeding, reviews 5565
    - susceptibility, testing 5012
- geographical distribution 1350
- insect pests
  - *Pyrrhalta luteola*
    - Argentina, biology, damage 2338
    - Australia 4980, 5787
      - bacterial insecticides 5790
      - biological control 5788
- molecular genetics, phylogeny, taxonomy 5541
- palaeoecology, plant succession, Greece 8989
- soil fungi, keratinophilic fungi, Slovakia 1922
- tree breeding, reviews, disease resistance, *Ophiostoma ulmi* 5565

Ulmus alata

- container grown plants, irrigation, USA 6756
- control, woody weeds, herbicides, USA 1766

Ulmus americana

- bacterial diseases, *Xylella fastidiosa,* USA, damage 4023
- callus, culture media, coconut milk 4863
- cultivars, North America, checklists 8137
- foliage, plant morphology, apical meristems 2044
- fungal diseases
  - *Ophiostoma ulmi*
    - susceptibility, testing, tissue culture 4863
    - tissue culture, callus, resistance 5635
    - USA, hybrids, resistance 1456
- hybrids, genetics, ploidy, disease resistance, USA 1456
- tissue culture, foliage 5088
- weed control, USA, herbicides 8643

Ulmus americana *cont.*
  wood anatomy, tyloses, suberin 7160
Ulmus davidiana
  crown, canopy, plant morphology 8065
  cultivars, North America, checklists 8137
  insect pests
    Kaltenbachiella japonica, Japan, biology 7437
    Pyrrhalta luteola, USA 7486
  wood anatomy, wood properties 7153
Ulmus davidiana* × *Ulmus pumila, insect pests, *Pyrrhalta luteola,* USA 7486
Ulmus glabra
  bark
    anatomy 4624
    crystals, diagnostic value 6410
  fungal diseases
    Ophiostoma, UK, disease vectors 5633
    Ophiostoma novo-ulmi, Norway, vectors 2346
  genetic variation, isoenzymes, taxonomy, France 5429
  insect pests
    Polygonia c-album
      biology 648
      host specificity 648
    Pyrrhalta luteola, Australia, insecticides 5789
    Scolytus, UK, disease vectors 5633
    Scolytus laevis, Norway, disease vectors 2346
  insects, Lepidoptera, Finland, food plants 2299
  mixed forests, natural regeneration, synecology, Poland 8179
  wood chemistry, esters 1253
Ulmus hollandica, bacterial diseases, *Xylella fastidiosa,* USA, damage 4023
Ulmus laevis
  bacterial diseases, Kazakhstan, disease vectors, *Rhamnusium gracilicorne* 10019
  genetic variation, isoenzymes, taxonomy, France 5429
  insect pests, *Rhamnusium gracilicorne,* Kazakhstan, disease vectors, bacterial diseases 10019
  insects, Lepidoptera, Finland, food plants 2299
  seeds, mechanical properties, testing 405
Ulmus macrocarpa, insect pests, *Pyrrhalta luteola,* USA 7486
Ulmus minor
  fungal diseases
    Ophiostoma
      foliage, chemistry, ceratoulmin 2269
      UK, disease vectors 5633
    Ophiostoma ulmi, tissue culture, callus, resistance 5635
  genetic variation, isoenzymes, taxonomy, France 5429
  insect pests
    Coleoptera, Uzbekistan, control 657
    Scolytus, UK, disease vectors 5633
  mycoplasmal diseases, witches' brooms, Italy 5670
  plant morphology, habit, taxonomy, Poland 1322
Ulmus parvifolia
  cultivars, North America, checklists 8137
  molecular genetics, resistance, *Stegophora ulmea* 8306
***Ulmus* 'Pioneer',** fungal diseases, *Ophiostoma ulmi,* tissue culture, callus, resistance 5635
Ulmus procera
  fungal diseases
    Ophiostoma, UK, disease vectors 5633
    Ophiostoma novo-ulmi, Portugal 9103
  insect pests
    Gossyparia spuria, USA, parasitoids 5691
    Pulvinaria regalis, UK, biology 5697
    Pyrrhalta luteola
      Australia, insecticides 5789
      USA
        control 5798
        parasitoids 5691
Ulmus procera *cont.*
  insect pests *cont.*
    Scolytus, UK, disease vectors 5633
Ulmus pumila
  autecology, Mongolia 8181
  cultivars, North America, checklists 8137
  fungal diseases, *Ophiostoma ulmi,* tissue culture, callus, resistance 5635
  insect pests
    Gossyparia spuria, USA, parasitoids 5691
    Pyrrhalta luteola
      USA 7486
        control 4046, 5798
        parasitoids 5691
  molecular genetics, resistance, *Stegophora ulmea* 8306
  shelterbelts, crop yield, Kazakhstan 8382
  tissue culture, culture media, micropropagation 8584
  weed control, USA, herbicides 8644
Ulmus pumila* × *Ulmus americana, insect pests, *Pyrrhalta luteola,* USA 7486
Ulmus pumila* × *Ulmus parvifolia, insect pests, *Pyrrhalta luteola,* USA 7486
Ulmus pumila* var. *arborea
  mixtures, silviculture, Ukraine 1785
  seeds, mechanical properties, testing 405
Ulmus szechuanica, insect pests, *Pyrrhalta luteola,* USA 7486
Ulmus wallichiana
  fungal diseases
    Ophiostoma, India 5634
    Ophiostoma himal-ulmi, new species, India 8295
Ulmus wilsoniana
  cultivars, North America, checklists 8137
  insect pests, *Pyrrhalta luteola,* USA 7486
Ultraviolet radiation
  damage, broadleaves, foliage, trichomes 7161
  deciduous forests, canopy, USA 1884
  Liquidambar styraciflua, foliage, development, photosynthesis 8764
  Pinus taeda, carbon dioxide enrichment, photosynthesis 2806
Umbellularia californica
  habit, variation, foliage, chemistry, flavonoids 8091
  seeds, triacylglycerols 1252
Uncaria, flora, India 7253
Underplanting
  Dipterocarpaceae, Philippines, forest plantations 8624
  mangroves, forest plantations, sustainability, Bangladesh 6108
  Pinus sylvestris, Poland, broadleaves 3461
  Quercus petraea, direct sowing, Germany 9498
  Quercus rubra, shelterwood system, weed control, Canada 9487
Understorey
  Abies sachalinensis, stand structure, canopy gaps, Japan, growth 8659
  botanical composition, *Pinus sylvestris,* site class assessment, Finland 9590
  broadleaves
    plant competition, Costa Rica 6559
    plant succession, USA, botanical composition 4783
    stand characteristics, India 5471
  brushwood, synecology, India 522
  Callitris columellaris, forest plantations, biomass production, soil properties, India 4334
  Chamaecyparis obtusa, soil morphology, crusts, forest influences, Japan 9762
  conifers
    clear felling, soil properties, Canada 3585
    light, Japan, crown, broadleaves 8064
    nitrogen fertilizers, Sweden 2611
    volcanoes, USA, damage 539
  control, edible fungi, Korea Republic 7812
  deciduous forests, cycling, soil fertility, USA 3619
  Dipterocarpaceae, birds, ecology, Indonesia 6681
Understorey *cont.*
  energy value, seasonal variation, forest fires, fire danger, Spain 9773
  Eucalyptus, coppice, synecology, India 522
  Eucalyptus marginata, reclamation, mined land, Australia 1542
  Fagus crenata, simulation, Japan 3117
  Fagus sylvatica, silviculture, Germany 9545
  forest ecology, forest borders, simulation, Brazil 4748
  forest trees
    increment, height, USA 3963
    light, photosynthesis, Japan 6255
  forests, geographical distribution, palaeoecology, Japan 1349
  Inga, seedlings, plant competition, Costa Rica 548
  light, wind damage, Puerto Rico, pioneer species 1075
  light intensity, Panama, experimental equipment 784
  phenology, reproductive behaviour, *Pinus densiflora,* Japan 9944
  Picea jezoensis, stand structure, canopy gaps, Japan, growth 8659
  Pinus, mixed forests, quality, Poland 1816
  Pinus ponderosa
    remote sensing
      USA 1343
      video cameras, USA 5204
  Pinus sylvestris
    fertilizers, roots, Norway 7751
    forest influences, air pollution, Russia 341
  Pseudotsuga menziesii, USA, development, *Acer circinatum* 5452
  Quercus
    natural regeneration
      canopy, USA 3118
      Germany, *Pinus sylvestris* 925
  Quercus agrifolia, synecology, USA 7305
  Quercus emoryi, forest influences, USA 1184
  rain forests, canopy gaps, Mexico 540
  remote sensing, radar, stand structure, techniques 7009
  secondary forests, Brunei Darussalam, surveys, classification 7307
  Shorea robusta, climax communities, synecology, India 522
  species diversity
    Picea abies, silvicultural systems, Sweden 9484
    Pinus taeda
      forest management, USA 1765
      weed control, USA 6124
    Sasa senanensis, plant succession, old fields, Japan 5463
  swamps, birds, ecology, Indonesia 6681
  Thujopsis dolabrata, Cryptomeria japonica, Japan, spatial distribution, stand characteristics 4327
  tropical forests, forest inventories, Ghana, surveys, techniques 4441
  wildlife, *Eucalyptus saligna,* forest plantations, Brazil 7515
Ungulates
  forest trees, forest management, national parks, Poland 4058
  rain forests, plant succession, Sierra Leone 1527
  seed dispersal, seed predation, tropical forests, Peru 685
United Arab Emirates, medicinal plants, books 3295
United States Virgin Islands
  Clusia rosea, photosynthesis, metabolism, habit 4700
  wind damage 1078
Upuna borneensis, wood anatomy 414
Uraecium, fungal diseases, *Pistacia integerrima,* India, foliage 3168
Urban areas
  amenity and recreation areas, USA, design 8461

Urban areas *cont.*
- amenity trees
  - planting
    - planning
      - UK
        - standards 10139
        - surveys 10139
- community forestry, USA 2423
- forest recreation, France, surveys 1585
- forest trees, degraded forests, forest decline, Korea Republic 9312
- landscape, amenity trees, Japan 10157
- nature conservation, land use planning, Canada 8439
- remote sensing, land use, USA 6239
- urban hinterland, deforestation, Developing Countries, effects, analysis 9264
- woody plants, air pollution, damage, India 6328

Urban forestry
- amenity forests, forest ownership, Norway, public opinion 10134
- beekeeping, South Africa 6951
- bibliographies 8477
- broadleaves, amenity trees, Germany 2432
- carbon cycle, air pollution, USA 4134
- choice of species, expert systems, USA 2434
- community forestry, USA 4963
- Czech Republic 10138
- development projects
  - Developing Countries 10147
  - UK 8454
- environment, landscape, South Africa 739
- forest fires, USA, planning, control 2915
- forest influences 1588
- forest trees, air pollution, tolerance, India 2875
- history, Czech Republic, green belts, management 10141
- India 4135
  - bibliographies, books 6775
- insect pests, *Lymantria dispar,* USA, control 5725
- Italy, management, planning 9308
- land use, USA, methodology 4138
- lichens, Russia 7306
- management, USA, books 8472
- Mexico 741
- mortality, fish pond soils, toxicity, Hong Kong 10144
- planning, management 3284
- *Populus nigra* var. *italica,* air pollution, lead, Italy 7992
- pruning, USA, surveys, plant residues 7605
- secondary forests, Korea Republic 9311
- street trees
  - amenity trees, USA 740
  - China 2435
- wind damage, protection, USA 10142

Uromyces truncicola, fungal diseases, *Sophora japonica,* Japan 2277, 5706

Ursidae, *Ursus americanus,* Canada, animal behaviour 8358

Ursus americanus
- Ursidae, Canada, animal behaviour 8358
- wildlife, USA, habitats, assessment 4074

Uruguay
- *Eucalyptus,* site class assessment, increment, volume, soil types 1003
- fuelwood, utilization, energy policy, forestry, legislation 8551
- *Pinus,* site class assessment, increment, volume, soil types 1003
- root nodules
  - *Frankia*
    - *Allocasuarina,* nitrogenase 1443
    - *Casuarina,* nitrogenase 1443

USA
- *Abies fraseri,* Christmas trees, grading, prices 9557
- afforestation
  - agricultural land
    - carbon cycle, subsidies 5986
    - risk, economics, decision making 9256

USA *cont.*
- air pollution
  - damage
    - forest economics 2779
    - stress factors, interactions 2460
  - ecology 2865
- *Alnus rubra,* reproductive behaviour, irrigation, spacing, fertilizers 9869
- arboriculture, pest management, standards, public opinion 4136
- Arid Regions, broadleaves, street trees, drought tolerance, testing 4509
- *Betula,* frost injury, climate 9672
- Betulaceae, pollen analysis, palaeoecology 3888
- biodiversity, forest resources, nature conservation 7631
- birds
  - dead trees, vegetation types 1515
  - Passeriformes, bamboos, habitats, bird control 6677
  - *Pseudotsuga menziesii,* logging, dead trees, ecology 2626
- broadleaves
  - air pollution, forest litter, decomposition 6344
  - plant growth regulators, biomass, growth 3781
  - rights of way, control, plant growth regulators 941
  - seedlings, nutrient uptake, canopy gaps 1144
  - street trees, climate, stress, tolerance 4985
  - water stress, genotype environment interaction, adaptation 2206
- *Camptotheca acuminata,* medicinal plants, reviews 7618
- carbon cycle, forests 7071
- community forestry, urban areas 2423
- coniferous forests, natural regeneration, weed control, agroforestry, sheep 7583
- controlled burning, research, history 2532
- environmental assessment, projects 5988
- fertilizers, sewage sludge, legislation 8593
- forest economics
  - finance 9399
  - private forestry, income tax 3530
- forest fires
  - national parks, damage, effects 7141
  - research, history 2532
- forest health 2524
- forest inventories 2731
  - maps 1022
  - site types, statistical analysis 2727
- forest management
  - forest policy
    - history, national forests, books 5927
    - nature reserves 4423
  - multiple use, non-wood forest products 5985
  - national forests, public opinion 1647
  - planning
    - computer techniques 3349
    - public opinion, participation 7702
    - public relations 8542
  - private forestry, research 1642
  - sustainability, certification 5039
  - weed control, herbicides 1768
- forest policy, forest management 8539
- forest recreation, trampling, resistance 5901-5902
- forest resources, research, bibliographies 763
- forest trees
  - canopy, remote sensing, reflectance, computer techniques 3525
  - forest litter, soil organic matter, nitrogen, mineralization 5254
  - geographical distribution, migration, global warming, simulation 9665
  - increment, simulation 7676
  - stand characteristics, growth models, forecasting 4221
  - volatile compounds 3741

USA *cont.*
- forestry
  - erosion, water pollution, legislation 4938
  - herbicides 1762
  - social values, forest management, environment 7704
- *Fraxinus*
  - fungal diseases, identification 3173
  - insect pests, identification 3173
- fungal diseases
  - conifers, spread, imports 2303
  - *Cronartium fusiforme, Pinus taeda,* population genetics 2274
  - *Mycosphaerella dearnessii, Pinus,* isolates, differentiation 9120
  - *Nectria cinnabarina,* broadleaves, chemical control, testing 2293
- hunting, licenses, forest economics 3528
- insect pests
  - conifers, spread, imports 2303
  - *Dendroctonus rufipennis,* forest management, decision making, risk 4892
  - *Lymantria dispar*
    - biological control, by *Bacillus thuringiensis,* reviews 5793
    - broadleaves, resistance 2318
    - history 2333
    - *Quercus,* plant nutrition, resistance 7446
    - simulation, spread, spatial distribution 636
  - *Podosesia aureocincta, Fraxinus pennsylvanica,* biological control, entomophilic nematodes 4897
- land use, projections 2728
- landscape
  - forest management, public opinion 1646
  - maps, multivariate analysis 8736
- legislation, private forestry 6855-6856
- *Liquidambar,* genetic variation, isoenzymes 586
- national parks, recreation, regulations, sociology 10132
- ornamental woody plants, integrated pest management, books 6788
- *Picea,* taxonomy, plant morphology, plant composition 501
- *Picea glauca,* genetic variation, isoenzymes 9977
- *Picea rubens*
  - acid deposition, foliage, damage 5313
  - air pollution, ozone, frost resistance 2864
- *Pinus albicaulis,* cones, production, estimation 2565
- *Pinus elliottii,* forest management, pulpwood 1784
- *Pinus flexilis,* gas exchange, simulation, palaeoecology 4706
- *Pinus ponderosa*
  - genetic variation
    - drought resistance, plant physiology, plant morphology 1889
    - gas exchange, photosynthesis, transpiration 8198
- *Pinus strobus,* foliage, air pollution, reviews 2872
- *Pinus taeda*
  - breeding programmes, genetic diversity 7358
  - forest management, pulpwood 1784
- plant parasitic nematodes
  - *Meloidogyne*
    - *Acer,* resistance 3189
    - *Quercus,* susceptibility 3188
- plant pathogenic bacteria, *Xylella fastidiosa,* amenity trees 2286
- *Populus,* soil amendments, composts, paper mill sludge 7764
- private forestry
  - forest economics, prices, analysis, methodology 1054
  - forest management, carbon cycle, simulation 3630
  - legislation 2530, 6854
  - taxes 2531

- **USA** *cont.*
  - *Pseudotsuga menziesii,* genetic variation, gas exchange, photosynthesis, transpiration 8198
  - *Quercus,* regeneration, conferences 2474
  - *Quercus rubra,* planting stock, roots, morphology, grading 6078
  - remote sensing
    - canopy, estimation 6240
    - geographical information systems, forest management, books 6774
    - mapping, statistical analysis 3521
    - multispectral imagery, vegetation, land use, change 9630
    - vegetation, classification 7011
  - reserved forests, Mali, government organizations 8516
  - *Rhus hirta,* air pollution, zinc, foliage, chemistry 9748
  - sampling, forest inventories, forest health, wildlife 5004
  - short rotation forestry, energy resources, environmental factors, forest economics, techniques 6100
  - silviculture
    - conferences 4172
    - vegetation types, books 3301
  - street trees, species diversity, surveys 2438
  - stumpage value
    - adjustment 6244
    - models, statistical analysis 4455
    - prices 1055
  - synecology, climate, conferences 2466
  - *Taxus,* forest nurseries, medicinal plants, prunings disposal 4308
  - *Tilia,* beekeeping, spacing 6950
  - urban forestry
    - forest influences 1588
    - management, books 8472
    - pruning, surveys, plant residues 7605
  - virgin forests, silviculture, deciduous forests 3432
  - weed control, herbicides, handbooks 4347
  - wilderness
    - economics, conferences 2473
    - management, conferences 2467
  - wildlife, *Castor canadensis,* management, economics 8361
  - Alabama
    - birds, controlled burning, fire ecology, mixed forests 6380
    - browse, *Lonicera japonica,* fertilizers 4053
    - floodplains, logging, water quality 2891
    - forest health 2729
    - fungal diseases
      - *Ploioderma hedgcockii, Pinus elliottii,* histopathology 8310
      - *Rhizoctonia, Pinus palustris,* control 3171
    - *Liquidambar styraciflua*
      - plant competition, soil water potential 166
      - plant water relations, plant competition, woody weeds 1771
    - *Liriodendron tulipifera,* foliage, decomposition, streams 7917
    - *Pinus*
      - forest nurseries
        - pruning, frost resistance 273
        - wrenching, frost resistance 273
    - *Pinus palustris*
      - controlled burning, soil, growth effects 5363
      - increment, basal area, simulation 2505
      - natural regeneration, canopy 4324
      - planting stock, protection, mortality 2624
    - *Pinus taeda*
      - plant water relations, plant competition, woody weeds 1771
      - thinning, environmental impact 6935
      - water stress, plant competition 166

- **USA** *cont.*
  - Alabama *cont.*
    - private forestry, forest management 3502
    - *Quercus rubra,* atmosphere, isoprenoids, emission 8010
    - *Taxodium distichum,* salt tolerance, flooding, genetic variation 5402
  - Alaska
    - *Betula,* defence mechanisms, *Lepus americanus,* evolution 4915
    - *Betula papyrifera,* natural regeneration, scarification 939
    - boreal forests
      - forest fires, remote sensing, radiometry 5202
      - nitrogen cycle, plant succession 6318
      - remote sensing, radar, seasonal variation 2755
      - soil types, permafrost, thawing 7880
    - *Chamaecyparis nootkatensis,* forest decline, climatic change 8121
    - deer, *Odocoileus hemionus,* clear felling, habitats 8366
    - forest trees
      - plant succession 3095
      - water stress, cavitation 4522
    - insect pests
      - *Dendroctonus rufipennis*
        - *Picea lutzii*
          - resistance 1491
          - simulation 1491
      - *Nematus calais, Salix lasiandra,* biology 2363
      - *Papilio canadensis,* broadleaves 5712
      - *Salix,* foliage 4032
    - *Larix laricina,* drought resistance, winter 1931
    - mixed forests, stand structure 7333
    - mountain forests, watersheds, streams, morphology 6698
    - *Picea,* plant nutrition, nitrogen 9721
    - *Picea glauca,* forest litter, decomposition, soil chemistry 7903
    - *Picea mariana*
      - boreal forests, oil spills, recovery 1980
      - drought resistance, winter 1931
      - oil spills, damage, permafrost 5342
    - *Picea sitchensis,* natural regeneration, thinning 928
    - plant succession, mine spoil, riparian vegetation 3950
    - *Populus,* defence mechanisms, *Lepus americanus,* evolution 4915
    - remote sensing
      - forest fires, mapping 4450
      - radar
        - climatic factors 1030
        - vegetation types, seasonal behaviour 1029
      - video imagery 6237
    - *Salix alaxensis,* reclamation, mined land 3230
    - *Salix setchelliana,* seedlings, establishment, streams 8173
    - snow damage, forest trees 4483
    - *Tsuga heterophylla,* natural regeneration, thinning 928
  - Appalachian States of USA
    - forest recreation, landscape, consumer preferences 2427
    - *Liriodendron tulipifera,* plant succession, population dynamics 4810
  - Arizona
    - amenity trees, water use 7059
    - birds, *Acer grandidentatum,* ecology 690
    - broadleaves, water uptake, riparian forests 1108
    - camping, economics, national forests 2428
    - *Carya illinoinensis,* remote sensing, radiometry, reflectance 7842
    - *Cercidium,* seed production 7214
    - *Cercidium microphyllum,* flowering, phenology 3030

- **USA** *cont.*
  - Arizona *cont.*
    - coniferous forests, botanical composition, forest fires 3933
    - conifers, site class assessment, equations 233
    - deer, *Odocoileus virginianus,* resting places 3202
    - forest inventories, forest management 2732
    - forest trees, population dynamics, increment, equations 9962
    - forestry, labour 56
    - insect pests
      - *Cameraria, Quercus emoryi,* damage 642
      - *Choristoneura occidentalis, Pseudotsuga menziesii* 9152
    - *Pinus eldarica*
      - carbon dioxide enrichment
        - biomass 3485
        - photosynthesis, growth 3003
      - photosynthesis, carbon dioxide enrichment 5226
    - *Pinus ponderosa*
      - fire danger, fuels, sampling 1191
      - increment, stand density, statistical analysis 1840
    - *Prosopis juliflora*
      - air pollution, heavy metals, indicator plants 1162
      - foliage, air pollution, smelters 8842
    - *Prosopis velutina*
      - groundwater, water stress 309
      - riparian forests, hydrology, simulation 1531
    - *Quercus emoryi*
      - forest influences, understorey 1184
      - natural regeneration, site types 7325
    - riparian forests, plant colonization, *Tamarix chinensis,* plant water relations 9018
    - *Robinia neomexicana,* soil parent materials, soil chemistry, forest influences 3694
    - squirrels
      - *Sciurus aberti*
        - *Pinus ponderosa*
          - cones 8359
          - feeding behaviour 6672
          - nesting 5821
      - *Tamiasciurus hudsonicus,* coniferous forests, ecology 3207
    - vegetation types, synecology, forest fires, altitude 3053
    - vesicular arbuscular mycorrhizas, *Glomus intraradices, Prosopis alba* 4843
  - Arkansas
    - agroforestry, research projects, technology transfer 9272
    - birds, forest management, *Pinus echinata* 4071
    - broadleaves, control, woody weeds, herbicides 1766-1767
    - *Carya illinoinensis,* forest plantations, weed control, herbicides 172
    - insect pests, *Clostera inclusa, Populus deltoides,* damage 4037
    - *Juglans nigra,* forest plantations, weed control, herbicides 172
    - *Pinus*
      - natural regeneration, weed control, woody weeds 1769
      - silvicultural systems, stand characteristics 7304
      - thinning, increment 4355
    - *Pinus echinata,* planting stock, protection 6084
    - *Pinus taeda*
      - container grown plants
        - weed control
          - growth 1747
          - mortality 1747
      - natural regeneration, forest litter, soil properties 9912

- **USA** *cont.*
  - Arkansas *cont.*
    - *Pinus taeda cont.*
      - silvicultural systems, natural regeneration, ground vegetation 6099
    - *Quercus*
      - forest plantations, weed control, herbicides 172
      - thinning, yield forecasting 2712
  - California
    - *Abies,* ground vegetation 6557
    - *Abies concolor*
      - genetic variation, wood anatomy 5387
      - vegetation types, stand characteristics 7281
    - *Abies magnifica,* soil properties 7918
    - *Acacia greggii,* reclamation, planting stock, protection 6712
    - agroforestry, irrigation, saline water, water purification 10112
    - broadleaves, plant water relations, stomatal resistance, abscisic acid 2083
    - *Cercocarpus traskiae,* molecular genetics, endangered species 5518
    - chaparral
      - forest fires, fire danger, remote sensing 2913
      - woody plants, nutrition physiology, nutrient allocation 2853
    - coniferous forests
      - air pollution, ozone, climate 7102
      - botanical composition, latitude, altitude 4770
      - forest decline, synecology, stress factors 2121
      - forest ecology, books 6785
      - remote sensing, mortality 4445-4446
    - conifers
      - foliage, phenolic compounds, soil pH 9690
      - forest fires, soil chemistry 2918
      - increment, plant competition, growth models 7675
      - precipitation 4083
    - *Cupressus,* chemotaxonomy, terpenoids 4738
    - *Cupressus bakeri*
      - cones, genetic variation, taxonomy 2198
      - foliage, genetic variation, taxonomy 2198
      - genetic variation, terpenoids 2195
    - dangerous trees, databases, *Pinus radiata* 5906
    - dead trees
      - decay, simulation 1331
      - volcanoes, soil air, carbon dioxide 8874-8875
    - deer, *Odocoileus hemionus,* forest management, hunting 10065
    - *Eucalyptus camaldulensis*
      - agroforestry
        - groundwater level, control 5870-5872
        - salinity, control 5870-5872
    - fishes, *Oncorhynchus clarki,* livestock farming, grazing 8357
    - forest fires, streams, aquatic invertebrates 8033
    - forest trees
      - amenity and recreation areas, hazards, analysis 8455
      - forest fires, mortality, simulation 380
      - forest influences, soil chemistry 5360
      - volatile compounds 3740
    - fungal diseases
      - *Apiognomonia veneta, Platanus acerifolia,* disease resistance 2284
      - *Ceratocystis fagacearum, Quercus,* resistance 4862
      - *Fusarium subglutinans,* conifers 5645

- **USA** *cont.*
  - California *cont.*
    - fungal diseases *cont.*
      - *Fusarium subglutinans* f.sp. *pini, Pinus radiata,* disease vectors 7400
      - *Heterobasidion annosum*
        - *Abies,* control 615
        - conifers 606
          - spread 9095
      - *Microsphaera penicillata, Platanus acerifolia,* disease resistance 2284
    - grazing, land use planning, fishes, freshwater ecology 8357
    - insect pests
      - *Acizzia uncatoides,* ornamental woody plants, biological control 7509
      - *Andricus californicus, Quercus,* host parasite relationships 2362
      - *Chrysomela aeneicollis, Salix* 654
      - *Conophthorus radiatae, Pinus radiata,* disease vectors 7400
      - Curculionidae, *Quercus wislizenii* 5745
      - *Dendroctonus, Pinus jeffreyi,* remote sensing 3187
      - *Dendroctonus brevicomis*
        - conifers 7475
        - *Pinus ponderosa,* attractants 656
      - *Ernobius punctulatus, Pinus radiata,* disease vectors 7400
      - *Eucallipterus tiliae, Tilia,* biological control 4898
      - *Gossyparia spuria, Ulmus,* parasitoids 5691
      - Hemiptera, amenity trees, control 5783
      - *Ips pini, Pinus* 7482
      - *Paranthrene robiniae,* Salicaceae, insecticides 5792
      - *Phoracantha semipunctata*
        - *Eucalyptus*
          - biological control 7500
          - distribution 7469
          - resistance 5762
      - *Pityophthorus orarius, Pseudotsuga menziesii,* seed orchards 7473
      - *Pyrrhalta luteola*
        - *Ulmus*
          - control 5798
          - parasitoids 5691
    - *Juniperus scopulorum,* palaeoecology 3893
    - *Libocedrus decurrens,* provenance trials 4263
    - mammals, *Thomomys,* vegetation 7918
    - mixed forests, forest decline, synecology, stress factors 2121
    - multipurpose trees, water management, saline water, agricultural land 5866
    - mycorrhizas, *Abies,* thinning, controlled burning 3145
    - old-growth forests, silvicultural systems 8605
    - *Pinus*
      - air pollution, deposition 332
      - chloroplast genetics, genetic variation 563
    - *Pinus balfouriana,* dendroclimatology 8465
    - *Pinus contorta,* genetic variation, isoenzymes, evolution 9047
    - *Pinus jeffreyi,* air pollution, ozone, damage 4554
    - *Pinus lambertiana,* frost injury, wood, grading 1989
    - *Pinus monticola,* canopy, throughfall 3690
    - *Pinus muricata*
      - controlled burning, soil water, infiltration 6382

- **USA** *cont.*
  - California *cont.*
    - *Pinus muricata cont.*
      - forest litter, decomposition, nitrogen 9705
    - *Pinus ponderosa*
      - air pollution
        - nitrogen, monitoring 7986
        - throughfall 8845
      - carbon dioxide enrichment, biomass, photosynthesis 1878
      - forest plantations, weed control, economics 1756
      - planting stock, plant competition 4329
      - weed control, woody weeds, herbicides 4343
    - *Populus,* foliage, movement, plant physiology, temperature 3799
    - protection forests, riparian forests, design 4930
    - *Pseudotsuga macrocarpa,* ozone, drought, increment 7107
    - *Pseudotsuga menziesii,* forest fires, stand development 379
    - *Quercus*
      - plant physiology 3318
      - recruitment 3112
      - reproductive behaviour, seed production, variation 4733
      - seed production, measurement, methodology 4190
      - taxonomy 3851
    - *Quercus agrifolia,* understorey, synecology 7305
    - *Quercus chrysolepis,* volume determination, equations 4390
    - *Quercus douglasii*
      - bare rooted stock, mortality, growth 1720
      - natural regeneration, drought resistance, plant competition 4517
    - *Quercus kelloggii,* thinning, epicormics 2946
    - remote sensing
      - Landsat, mapping, stand characteristics 4444
      - stand structure, photosynthesis, vegetation types 5199
    - riparian forests, synecology 3916
    - rodents, Geomyidae, population dynamics, sampling 7671
    - *Sequoia sempervirens,* thinning, increment 4357
    - *Sequoiadendron giganteum*
      - age of trees, methodology 9314
      - ozone, plant physiology 2068
    - urban forestry
      - carbon cycle, air pollution 4134
      - forest fires, planning, control 2915
    - vegetation types 7281
      - synecology, altitude 6526
    - watersheds, logging, environmental impact, assessment 8005
    - wildlife
      - *Felis concolor,* habitats, fragmentation 6683
      - habitats, *Quercus,* simulation 4901
      - small mammals, ecology 7518
  - Colorado
    - *Abies lasiocarpa*
      - subalpine forests
        - disturbed land
          - human activity 9940
          - recovery 9940
    - conifers
      - carotenoids, seasonal variation, photosynthesis 6477
      - nitrogen cycle, water pollution, simulation 3625
      - subalpine forests, dendroclimatology 4470
      - virgin forests, remote sensing 1865
    - deer, *Odocoileus hemionus,* repellents 3199

USA *cont.*
  Colorado *cont.*
    forest trees
      plant nutrition, iron, waterlogging 3638
      respiration, foliage, nitrogen 8102
    insect pests
      Choristoneura occidentalis, conifers, dendrochronology 6765
      Disholcaspis quercusmamma, Quercus macrocarpa, street trees 7491
    Picea
      forest influences, throughfall, isotopes 7124
      subalpine forests
        disturbed land
          human activity 9940
          recovery 9940
    Pinus
      photosynthesis, age of trees, senescence 2992
      shoots, plant nutrition, plant physiology 2036
    Pinus contorta
      carbon cycle, respiration, stand development 2851
      stand structure, forest fires 4809
    Pinus edulis, genetic variation, population genetics 6590
    Pinus flexilis
      age structure 5167
      stem form, population genetics 3708
    Pinus ponderosa, phloem, resins 432
    Populus tremuloides
      gas exchange, isoprenoids, seasonal variation, temperature 4681
      subalpine forests
        disturbed land
          human activity 9940
          recovery 9940
    Salicaceae, riparian forests, natural regeneration, site factors 8393
    Salix, plant colonization, peatlands 9020
    Salix rubens, plant colonization, reproductive behaviour 3947
    squirrels, *Sciurus aberti, Pinus ponderosa,* damage 432
    subalpine forests, dendrochronology 3291
    tundra, increment, height, spatial variation 7822
    vegetation, species diversity, sampling 9349
  Connecticut
    Betula, defence mechanisms, *Lepus americanus,* evolution 4915
    broadleaves, light, soil water, increment 5181
    Chamaecyparis thyoides, nutrient uptake, translocation, peatlands 5295
    forest roads, soil stabilization, plant colonization, grasses 4088
    forest trees, recruitment, simulation, spatial distribution 4206
    insect pests, *Lambdina fervidaria, Tsuga canadensis* 2330
    mammals, *Lepus americanus,* broadleaves, browsing damage 4919
    Populus, defence mechanisms, *Lepus americanus,* evolution 4915
    Quercus, thinning, stand development, growth 174
    Quercus rubra, air pollution, deposition, simulation 2871
    stand development, mortality, light, deciduous forests 7328
  Corn Belt States of USA, *Quercus alba,* tree breeding, early selection 6602
  Delaware
    broadleaves, understorey, plant succession, botanical composition 4783
    forest borders, synecology, plant succession 3098

USA *cont.*
  Delta States of USA, *Pinus taeda,* selection system, increment 3480
  District of Columbia
    bacterial diseases
      Erwinia amylovora, Sorbus 9122
      Xylella fastidiosa, Ulmus, damage 4023
    fungal diseases
      Discula destructiva, Cornus, ornamental woody plants, resistance 8311
      Ophiostoma ulmi, Ulmus americana 1456
    Maackia amurensis, shoot cuttings 1707
  Florida
    Arecaceae, autecology 6525
    bacterial diseases, *Xylella fastidiosa, Quercus* 2288
    birds
      Columba leucocephala, deciduous forests, fragmentation 4059
      Haliaeetus leucocephalus, mangroves, nesting 3197
      Pinus clausa, forest fires, clear felling 9213
    broadleaved evergreen forests, phytogeography 3923
    coastal plant communities, water uptake, isotope fractionation 2836
    conifers, respiration 5412
    Eucalyptus, short rotation forestry 6098
    Eucalyptus grandis, planting stock 878
    forest fires, wetlands 369
    forest trees, vegetation types, surveys, history 3892
    fungal diseases
      Botryodiplodia theobromae, Pinus elliottii, seeds 4016
      Phytophthora cinnamomi, Pinus, damage 5057
      Ploioderma hedgcockii, Pinus elliottii, histopathology 8310
      Rhizoctonia, Pinus palustris, control 3171
    insect pests
      Hypsipyla grandella, Swietenia mahagoni, chemical control 8351
      Lymantria dispar, forest trees, pheromone traps 674
      Macalla thyrsisalis, Swietenia mahagoni, chemical control 8351
      Oxyops vitiosa, Melaleuca quinquenervia, biological control 6933
      Phyllocnistis meliacella, Swietenia mahagoni, chemical control 8351
      Stilbosis quadricustatella, Quercus virginiana, resistance 7447
    Magnolia grandiflora, root pruning, transplanting, growth 3285
    mangrove forests
      climatic change, environmental assessment 6264
      soil chemistry, flooding 3937
      wind damage 4481
    ornamental woody plants, container grown plants, irrigation 6756
    Pinus
      fertilizers, split dressings 9457
      foliage
        cycling
          fertilizers 2859
          weed control 2859
      forest plantations, weed control 170
      short rotation forestry 6098
    Pinus clausa, natural regeneration, logging, forest fires 5469
    Pinus elliottii
      canopy, foliage, remote sensing 8732
      carbon cycle, simulation 3005

USA *cont.*
  Florida *cont.*
    Pinus elliottii cont.
      fertilizers, soil chemistry, persistence 2618
      nutrient uptake, simulation 2860
      old fields, site preparation, pest control 6927
      photosynthesis, fertilizers, seasonal variation 4695
      planting stock, size, water stress 3443
    Pinus palustris
      controlled burning, ecology, ground vegetation 7135
      increment, basal area, simulation 2505
    pollen analysis, vegetation, climate, history 513
    Rhizophora mangle, water uptake, habit 3609
    Sabal palmetto, transplanting, survival, growth 7608
    sclerophyllous forests, phytogeography 3923
    Swietenia mahagoni, pollination, insects, Thysanoptera 9129
    Torreya taxifolia, forest decline, ecology 7200
    vegetation types
      deforestation 6721
      wind damage 4480
    wetlands, books 1594
    wildlife
      forest ecology, fragmentation 4907
      lizards, *Pinus clausa,* clear felling 4920
    woody plants, geographical distribution, climate, simulation 3070
  Georgia
    Albizia julibrissin, agroforestry, cycling 10116
    birds, *Picoides borealis,* population change 9210
    broadleaves, frost resistance, climate, simulation 800
    Christmas trees, consumer behaviour 6143
    coniferous forests, acid deposition, canopy, leaching 8374
    Cornus florida, planting stock, lifting 1732
    deciduous forests
      acid deposition, canopy, leaching 8374
      herbicides, glyphosate, residues 5143
    deer, *Odocoileus virginianus,* forest trees, browse 3196
    forest ecology, species diversity, plant succession, land use 5461
    forest fires, wetlands 369
    forest fragmentation, birds, species diversity 10075
    forest health 2729
    fungal diseases, *Cronartium fusiforme, Pinus elliottii,* resistance 2188
    insect pests, *Rhyacionia frustrana, Pinus taeda,* population dynamics 5728
    marine fungi, *Halophytophthora,* salt marshes, forest litter 9066
    mixed forests, atmosphere, isoprenoids, emission 8011
    Pinus
      fertilizers, split dressings 9457
      forest nurseries
        pruning, frost resistance 273
        wrenching, frost resistance 273
      forest plantations, weed control 170
      hurricanes, stems, damage 2900
      species trials 5053
    Pinus elliottii, progeny testing, disease resistance, *Cronartium fusiforme* 2188

- **USA** *cont.*
  - Georgia *cont.*
    - *Pinus palustris*
      - increment, basal area, simulation 2505
      - seedlings, forest fires 4754
    - *Pinus* (Southern), geographical information systems, hydrology, biomass production 2506
    - *Pinus taeda*
      - carbon dioxide enrichment
        - gas exchange, adaptation 8752
        - plant physiology 7024
      - site preparation, chemical treatment, forest economics 1873
      - thinning, controlled burning, mortality 176
      - tree breeding, early selection, economics 3128
      - weed control, understorey, species diversity 6124
    - *Protofagacea allonensis,* palaeobotany 5377
    - riparian forests, forest influences, water quality, environmental degradation 5346
    - secondary forests, environmental factors 2151
    - site preparation, feller bunchers 4367
    - swamps
      - forest influences
        - air, emission 362
        - hydrology, emission 362
  - Great Plains States of USA, agroforestry, sustainability 9322
  - Gulf States of USA
    - fungal diseases, blue stain, *Pinus taeda,* pathogenicity 7399
    - insect pests, *Dendroctonus frontalis, Pinus taeda,* control 8352
    - *Pinus palustris,* forest plantations, mensuration, equations 6165
  - Hawaii
    - birds, Phasianidae, introduced species, ecology 7527
    - broadleaves, short rotation forestry, simulation 913
    - *Cibotium glaucum,* rain forests, plant nutrition, growth 5455
    - deciduous forests, soil chemistry, nutrient deficiencies, methodology 4191
    - forest trees, epiphytes, mycorrhizas 9080
    - *Hibiscadelphus woodii,* taxonomy 7237
    - *Leucaena,* gums, chemistry, provenance 2979
    - *Leucaena leucocephala,* nitrogen cycle, nitrogen fixation 1138
    - *Metrosideros polymorpha*
      - foliage, morphology 2951
      - forest litter, decomposition, site factors 4492
      - nutrient deficiencies, phosphorus, fertilizers 9461
      - plant nutrition, soil chemistry, chronosequences 6287
      - plant succession
        - volcanic soils, nitrogen fixation 2827
        - water stress 1398
      - soil chemistry, phosphorus, forest litter 7882
      - stand characteristics, population dynamics, evolution 3989
    - multipurpose trees, silvicultural systems, growth 6090
    - *Pinus taeda,* stand density, stand characteristics, increment 947
    - rain forests
      - altitude, synecology 3918
      - biomass, altitude, volcanoes 3103
      - climate 9669
      - mountain forests, soil formation 8787
      - plant succession 7311
        - altitude, volcanoes 3103
    - root nodules, *Frankia,* broadleaves 4848

- **USA** *cont.*
  - Idaho
    - conifers, advance growth, liberation felling 2627
    - forest plantations, conifers, plant competition, survival 6922
    - fungal diseases
      - *Cronartium ribicola, Pinus albicaulis,* natural regeneration 9105
      - stain fungi, *Pseudotsuga menziesii,* disease vectors 5661
      - *Valdensinia heterodoxa,* Ericaceae 4870
    - insect pests
      - *Choristoneura occidentalis, Pseudotsuga menziesii* 8093
      - *Dendroctonus pseudotsugae, Pseudotsuga menziesii,* disease vectors 5661
    - *Larix occidentalis,* water use efficiency, genetic variation, growth 1274
    - ornamental woody plants, silvicultural characters 8456
    - protection forests, riparian forests, design 4930
    - *Pseudotsuga menziesii*
      - foliage, chemistry, seasonal variation 8093
      - natural regeneration, site factors 6103
    - small mammals, vegetation types 9224
    - *Thuja plicata,* population genetics, seedling growth, frost resistance 1429
    - vegetation types
      - nature conservation 9298
      - soil properties, classification 3057
    - wildlife
      - *Rangifer tarandus, Abies lasiocarpa,* lichens 5809
      - *Thomomys talpoides,* conifers, damage 6922
    - woody weeds, rangelands, weed control, physical control 5147
    - yield forecasting 8541
  - Illinois
    - *Acer saccharinum,* coppice, biomass production, plant water relations 6096
    - birds, predation, forest borders 9214
    - broadleaves
      - plant succession, old fields 4794
      - reclamation, mined land, tillage 4093
      - transplanting, plant water relations 5909
    - forest plantations, hardwoods, wood chemistry 8919
    - forest trees, bark, thickness, fire resistance 1197
    - *Gymnocladus dioica*
      - forest nurseries
        - tree guards
          - increment 442
          - plant water relations 442
    - insect pests
      - *Plagiodera versicolora, Salix,* biology 7468
      - *Pyrrhalta luteola, Ulmus* 7486
    - *Juglans nigra,* seed orchards, genetic variation, isoenzymes 5540
    - *Quercus alba,* planting stock, reclamation, mine spoil 5849
    - *Quercus macrocarpa,* gene mapping, polymerase chain reaction 9061
    - *Quercus palustris,* dieback, foliage, chemical composition 3020
    - remote sensing, land use, urban areas 6239
    - riparian forests, protection forests, streams 4076
    - *Taxodium distichum,* swamps, forest litter, decomposition 3579
    - urban forestry, wind damage, protection 10142
    - woody weeds, weed control, herbicides 8643

- **USA** *cont.*
  - Indiana
    - birds
      - *Aix sponsa,* cavities in trees, nesting 6686
      - parasitism, clear felling, landscape 6911
    - broadleaves
      - afforestation, mined land, reclaimed land 9539
      - linear plantations, water pollution, control 9496
      - logging, damage, soil density 2895
    - insect pests, *Tomicus piniperda, Pinus sylvestris,* control 9195
    - *Juglans nigra,* seed orchards, genetic variation, isoenzymes 5540
    - *Quercus,* clear felling, natural regeneration 147
    - *Quercus rubra,* planting, tree guards 937
    - vegetation types, remote sensing, satellites, drought 7851
  - Iowa
    - agroforestry, riverbank protection, pollution control, buffer zones 9273
    - bottomland forests, botanical composition, simulation 1376
    - insect pests, *Chrysomela scripta, Populus,* genetic diversity 9172
    - *Juglans nigra,* provenance trials, genetics 5059
    - *Populus,* riparian forests, agroforestry, agricultural land 3269
    - *Quercus,* natural regeneration, fires 3699
    - *Quercus alba,* forest litter, fungi, crystals 8251
    - *Quercus rubra,* planting stock, grading, roots 6078
  - Kansas
    - amenity trees, species trials 68
    - *Fraxinus pennsylvanica,* planting stock, survival, growth 4309
    - *Juglans nigra,* provenance trials 834
    - *Pinus sylvestris,* Christmas trees, progeny testing 2668
    - *Quercus,* foliage, light, temperature 3791
    - riparian forests, forest ecology, population dynamics 5442
    - weed control, broadleaves, power lines 4344
    - woody weeds, weed control, herbicides 8644
  - Kentucky
    - *Acer saccharinum,* plant growth regulators, growth, morphology 2063
    - *Acer saccharum,* mulching, roots, plant water relations 4300
    - bacterial diseases
      - *Xylella fastidiosa*
        - *Quercus macrocarpa,* new host records 8314
        - street trees 8314
    - broadleaves, natural regeneration, rights of way, cutting frequency 1332
    - Chiroptera, *Plecotus townsendii,* ecology 3208
    - deciduous forests
      - plant colonization, *Lonicera maackii,* regeneration 5454
      - plant succession, site factors 3096
    - mensuration, equipment, lasers, economic evaluation 9573
    - mixed forests, plant succession, site factors 3096
  - Lake States of USA
    - birds, mixed forests, population dynamics 4924
    - forest trees, site class assessment, stand density 1839
    - fungal diseases, *Ceratocystis fagacearum, Quercus* 1459
    - *Pinus resinosa*
      - forest plantations, thinning, simulation 8508

- **USA** *cont.*
  - Lake States of USA *cont.*
    - *Pinus resinosa cont.*
      - site class assessment, equations, height 217
      - yield forecasting, economic analysis, computer techniques 4229
    - stand structure, diameter, distribution, simulation 9580
    - *Tsuga canadensis*, stand structure, age 4799
    - vegetation types, acid deposition, monitoring 4781
    - wolves, *Canis lupus lycaon*, habitats 7526
  - Louisiana
    - forest inventories, logging, regeneration 3503
    - forest trees, secondary forests, stand characteristics, growth 7321
    - forests, wetlands, nitrogen cycle 1949
    - fungal diseases, *Cronartium fusiforme*, *Pinus elliottii*, silviculture 4024
    - insect pests
      - *Dendroctonus frontalis*
        - *Pinus* (Southern), spread 653
        - *Pinus taeda*, plant water relations 8338
      - Hemiptera, *Pinus taeda* 7438
      - *Sarucallis kahawaluokalani*, *Lagerstroemia indica*, control 2375
    - *Pinus*, short rotation forestry, increment 2703
    - *Pinus taeda*
      - agroforestry 9274
      - foliage, basal area, correlation 2927
      - forest plantations, weed control, herbicides 3449
      - growing stock, stand density 2639
      - natural regeneration, site preparation 4320
      - natural thinning, equations 3456
      - silvicultural systems, natural regeneration, ground vegetation 6099
      - site preparation
        - herbicides 3446
        - plant competition 3444
      - spacing
        - plant competition, growth 1780
        - wood properties 4587
      - thinning, wood properties 4587
      - understorey, species diversity, forest management 1765
      - weed control, herbicides 2649
    - remote sensing, bottomland forests, forest trees, identification 9643
    - *Taxodium distichum*
      - salt tolerance, flooding, genetic variation 5402
      - shoot cuttings, rooting 3397
    - woody plants, seed banks, seed germination, viability 2097
    - woody weeds
      - control
        - *Pinus taeda*
          - controlled burning 6125
          - herbicides 6125
  - Maine
    - *Abies balsamea*
      - foliage, age, leaf area 5370
      - increment, thinning, soil water regimes 1774
    - *Betula*, defence mechanisms, *Lepus americanus*, evolution 4915
    - birds, species diversity, clear felling 1510
    - coniferous forests
      - remote sensing
        - reflectance 1046
        - stand characteristics, simulation 1039
        - synecology, soil properties 1382
      - throughfall, acid deposition, spatial variation 7657

- **USA** *cont.*
  - Maine *cont.*
    - conifers
      - acid deposition, watersheds, pH 352
      - clear felling, watersheds, pH 352
      - weed control
        - cleaning 2650
          - growth 2651
    - deciduous forests
      - nitrogen cycle 9731
      - runoff, acidification 3574
    - deer, *Alces alces*, site preparation, herbicides 9229
    - *Fagus grandifolia*, deciduous forests, soil chemistry, sulfur 8775
    - fungal diseases, *Nectria*, deciduous forests 1462
    - insect pests
      - *Choristoneura fumiferana*
        - forest trees, natural regeneration 1487
        - simulation, population dynamics 796
    - *Larix decidua*, site class assessment, soil texture, methodology 1842
    - mammals, *Lepus americanus*, broadleaves, browsing damage 4919
    - mice, *Peromyscus*, habitats 7539
    - mistletoes, *Arceuthobium pusillum*, *Picea rubens*, distribution 616
    - mixed forests, acid deposition, estimation 3320
    - palaeoecology, forest ecology, plant succession 6531
    - peatlands, palaeoecology 8150
    - *Picea*, stand characteristics, remote sensing, simulation 2754
    - *Picea rubens*
      - biogeochemistry, aluminium 8827
      - coniferous forests, forest litter, decomposition 299
      - injuries, defence mechanisms, geographical variation 8110
    - *Pinus resinosa*, remote sensing, radar, site factors 1040
    - *Populus*, defence mechanisms, *Lepus americanus*, evolution 4915
    - remote sensing
      - radar
        - biomass 1031
        - data processing, vegetation types 1041
      - reflectance, vegetation types 1854
      - vegetation types, spectrometers 1044
    - wildlife, coniferous forests, fertilizers, paper mill sludge 4069
  - Maryland
    - birds, *Haliaeetus leucocephalus*, habitats 6685
    - deciduous forests
      - forest litter, plant succession 1911
      - light penetration, stand age 3556
      - ultraviolet radiation, canopy 1884
    - deforestation, forest ecology 1550
    - fungal diseases, *Microsphaera syringae*, *Syringa vulgaris*, control 4876
    - insect pests
      - Chrysomelidae, distribution 2343
      - *Lymantria dispar*
        - control 5785
        - forest trees, physical control 7498
        - natural enemies, entomogenous fungi 2336
        - *Quercus*, control 5786, 5799
        - urban forestry, control 5725
      - *Phratora purpurea*, *Populus grandidentata* 2343
      - *Podosesia aureocincta*, *Fraxinus pennsylvanica*, biological control 4897
      - *Synanthedon scitula*, *Cornus florida*, biological control 2374
      - *Thyridopteryx ephemeraeformis*, *Thuja occidentalis*, control 6665

- **USA** *cont.*
  - Maryland *cont.*
    - *Liquidambar styraciflua*, plant competition, climbers, woody weeds 6122
    - *Lonicera japonica*, woody weeds, *Liquidambar styraciflua* 6122
    - *Maackia amurensis*, shoot cuttings 1707
    - *Parthenocissus quinquefolia*, woody weeds, *Liquidambar styraciflua* 6122
  - Massachusetts
    - *Acer*
      - canopy gaps
        - growth, survival 7868
        - morphology, growth 4800
    - *Acer rubrum*, wetlands, weed control, rights of way 1754
    - *Betula*, air pollution, nitrogen, stand characteristics 1155
    - *Chamaecyparis thyoides*, pollen analysis, forest fires, wetlands, plant succession 3877
    - coastal plant communities, air pollution, nitrogen, nitrogen cycle 5304
    - deciduous forests
      - gas exchange, simulation 3328
      - nitrogen cycle, air pollution, nitrogen retention 326
    - *Fagus grandifolia*, genetic variation, isoenzymes 8240
    - forests, mosses, pollen analysis, dispersal 3040
    - insect pests
      - *Lymantria dispar*
        - broadleaves, biological control 5796
        - control 5785
        - natural enemies, entomogenous fungi 2336
        - *Quercus rubra*, biological control 9162
        - sampling 9160
    - mixed forests, remote sensing, biochemistry, plant water relations 8737
    - mycoplasmal diseases, *Fraxinus americana*, chemical control 10022
    - *Pinus resinosa*
      - nitrogen cycle, air pollution, nitrogen retention 326
      - soil water, gas exchange, methane 4503
    - *Quercus*, thinning, birds, ecology 1524
    - *Tsuga canadensis*, forest ecology, land use, history 717
    - urban forestry, street trees, amenity trees 740
    - vegetation, population dynamics, land use, history 716
    - wind damage, simulation 2801
    - woody weeds, *Lonicera tatarica*, forests, natural regeneration 5473
  - Michigan
    - *Acer saccharum*
      - biomass, acid deposition, climate 5172
      - heartwood, discoloration, selection system 1181
      - roots
        - mortality, soil temperature 2030
        - plant morphology 409
    - birds, *Dendroica kirtlandii*, *Pinus banksiana*, forest fires 3218
    - broadleaves, soil chemistry, nitrogen, soil biology 307
    - *Cornus florida*, ornamental woody plants, provenance trials 5910
    - deciduous forests
      - carbon cycle, respiration, clear felling 3592
      - herbicides, glyphosate, residues 5143
      - rotations, forest economics, basal area 4460

- **USA** *cont.*
  - Michigan *cont.*
    - ectomycorrhizas, *Suillus luteus, Quercus rubra,* forest nurseries 3149
    - forest ecology, deciduous forests, growth models, stress analysis 4223
    - forest inventories
      - measurement, errors 4437
      - sampling, methodology 4431
    - forest trees
      - forest ecology, plant succession, plant competition 7312
      - forest litter, decomposition 9703
      - increment, height, understorey 3963
      - recruitment, simulation, spatial distribution 4206
    - fungal diseases
      - *Armillaria ostoyae, Pinus resinosa,* population genetics 2261
      - *Ceratocystis fagacearum, Quercus* 1459
      - *Cryphonectria parasitica, Castanea dentata,* hypovirulence 6635
      - *Cytospora, Picea pungens* 4866
      - *Phomopsis occulta, Picea pungens* 8298
    - insect pests
      - *Corthylus punctatissimus, Acer* 5743
      - *Lymantria dispar*
        - broadleaves, biology 5733
        - *Populus,* biology 645-646
        - *Quercus,* biology 645-646
      - *Malacosoma disstria, Populus tremuloides,* population dynamics 5701
      - *Papilio canadensis,* broadleaves 5712
      - Scolytidae, *Pinus sylvestris,* interspecific competition 7470
      - *Tomicus piniperda, Pinus sylvestris,* control 9195
    - land use, planning 8405
    - landscape ecology 1587
    - mixed forests
      - dead wood, decomposition 3587
      - forest fires, forest litter 2923
      - pollen analysis, palaeoecology 8992
      - stand characteristics, synecology, canopy gaps 4806
    - *Pinus resinosa,* forest management, yield forecasting, sustainability 2523
    - *Pinus strobus,* seed trees, natural regeneration, stand characteristics 3094
    - *Populus*
      - forest resources, forest economics 813
      - short rotation forestry, growth models, photosynthesis 1619
    - *Populus canadensis,* carbon dioxide enrichment, soil fertility 5228
    - *Populus grandidentata*
      - carbon dioxide enrichment, cycling 3548
      - fertilizers, sewage sludge, ecology 3416
    - *Quercus,* soil texture, fine fraction, biomass production 1091
    - riparian forests, forest litter, decomposition, streams 5253
    - *Robinia pseudoacacia*
      - genetic variation, coppicing, suckering 2211
      - mulches, decomposition, agroforestry 9276
    - stand development, mortality, light, deciduous forests 7328
    - wildlife, *Alces alces,* browse, boreal forests 3214
  - Minnesota
    - boreal forests, plant succession 9017
    - broadleaves, increment, topography, soil properties 5235
    - conifers, weed control 8645
- **USA** *cont.*
  - Minnesota *cont.*
    - deer, *Odocoileus hemionus, Quercus rubra,* plant succession 3093
    - forest ownership, forest inventories, geographical information systems 6234
    - forest recreation, permits, wilderness 9306
    - forest trees, site class assessment, stand density 1839
    - forests, landscape, fire suppression, settlement 383
    - fungal diseases
      - *Armillaria ostoyae, Pinus,* population structure 9094
      - *Ceratocystis fagacearum, Quercus,* control 3170
      - *Hypoxylon mammatum, Populus tremuloides,* disease vectors 10011
    - insect pests
      - *Malacosoma disstria, Populus tremuloides,* population dynamics 5701
      - *Saperda inornata, Populus tremuloides,* disease vectors 10011
    - *Juglans nigra,* provenance trials, genetics 5059
    - landscape ecology, fire suppression, simulation 4131
    - *Maackia amurensis,* shoot cuttings 1707
    - mixed forests, forest management, remote sensing, thematic mapper 7005
    - multispectral imagery, thematic mapper, forest management 8733
    - mycorrhizas, *Laccaria bicolor,* population genetics, forest trees 9997
    - *Pinus resinosa,* weed competition, grasses, planting 6123
    - private forestry, forest management, forest economics 210
    - *Quercus,* forest fires, arthropods, ecology 2004
  - Mississippi
    - broadleaves
      - mulching, cover crops 5113
      - tree classes, bottomland forests 9575
    - insect pests, *Clostera inclusa, Populus deltoides,* damage 4037
    - *Liquidambar styraciflua,* nitrogen fertilizers, genetic variation 9464
    - *Pinus palustris,* increment, basal area, simulation 2505
    - *Pinus taeda*
      - flowering, seed orchards, variation 9877
      - plant composition, seed orchards, variation 9877
    - *Populus deltoides,* forest plantations, weed control, herbicides 173
  - Missouri
    - deer, *Odocoileus virginianus, Pinus strobus,* Christmas trees 4370
    - forest fires, frequency, dendrochronology, *Quercus stellata* 8029
    - geographical information systems, land classification, forest ownership 6235
    - insect pests
      - *Conotrachelus retentus, Juglans nigra* 9164
      - *Quercus alba,* birds, growth 4908
    - *Juglans nigra*
      - multipurpose trees, tree breeding, NPK fertilizers 9055
      - seed orchards, genetic variation, isoenzymes 5540
    - *Juniperus virginiana,* dendrochronology, heartwood, acid deposition 4141
    - *Quercus*
      - forest decline
        - dendrochronology 9863
        - forest management 6504
      - pruning, profitability 6363
- **USA** *cont.*
  - Missouri *cont.*
    - *Quercus rubra*
      - artificial regeneration, tree guards 8625
      - genetic variation, plant water relations, herbivores 8810
  - Montana
    - coniferous forests, watersheds, hydrology, simulation 4084
    - conifers
      - height classes 229
      - respiration 5412
    - deer, *Odocoileus virginianus,* ecology, management 3213
    - forest management, planning, forest inventories, sampling 7673
    - forestry practices, water pollution, risk assessment 3676
    - fungal diseases, *Cronartium ribicola, Pinus albicaulis,* forest decline 470
    - *Larix,* hybrids, seed germination, seedling growth 1432
    - mycorrhizas, *Cortinarius hedyaromaticus, Populus tremuloides* 601
    - *Pinus albicaulis,* forest decline, remote sensing 470
    - treelines 3894
  - Mountain States of USA
    - logging, runoff 8380
    - *Pinus ponderosa,* virgin forests, stand characteristics, nature conservation 3956
  - Nebraska
    - insect pests, *Pyrrhalta luteola, Ulmus pumila,* control 4046
    - land use planning, tribes, agroforestry 8406
  - Nevada
    - amenity trees, water use, transpiration 8804
    - birds, *Pinus jeffreyi,* seed dispersal 693
    - *Ceanothus velutinus,* forest influences, soil chemistry 8780
    - *Pinus jeffreyi,* forest influences, soil chemistry 8780
    - *Pinus monophylla,* plant water relations, synecology 8808
    - *Pinus ponderosa*
      - biomass distribution, climate, simulation 4406
      - carbon dioxide enrichment, biomass, photosynthesis 1878
    - rodents, *Pinus jeffreyi,* seed dispersal 691, 693
  - New England States of USA
    - broadleaves, carbon dioxide enrichment, light, plant succession 3099
    - deciduous forests, wetlands, soil biology, microorganisms 306
    - forest trees, pollen, vegetation, simulation 4805
    - *Quercus rubra,* tree guards, shoots, growth 3431
    - remote sensing, forest fragmentation 6998
  - New Hampshire
    - broadleaves
      - plant succession, plant colonization, wind damage 277
      - roots, growth 1229
      - wind damage, stand structure, growth 277
    - clear felling
      - cycling, soil chemistry, streams 2907
      - landscape 6754
    - deciduous forests
      - cycling, potassium, watersheds 319
      - forest litter, decomposition, roots 2824
    - fertilizers, water quality, simulation, sewage sludge 3420
    - forest trees, biomass, equations, allometry 4195

- **USA** *cont.*
  - New Hampshire *cont.*
    - logging, erosion, streams, water quality 4578
    - nitrogen fixing trees, nitrogen cycle, measurement, nitrification 3621
    - *Pinus strobus,* growth models 8509
    - private forestry, extension 2537
    - *Prunus pensylvanica,* seedling growth, plant competition, browsing damage 3878
    - sewage sludge, disposal, environmental impact, simulation 5855
    - urban forestry, community forestry 4963
  - New Jersey
    - *Acer rubrum,* wetlands, *Clethra alnifolia,* regeneration 5453
    - *Ailanthus altissima, Quercus,* forest litter, plant succession 4791
    - bacterial diseases, *Erwinia amylovora, Sorbus* 9122
    - *Carya tomentosa,* natural regeneration 3107
    - *Chamaecyparis thyoides*
      - microrelief, wetlands, disturbed land 7875
      - nutrient uptake, translocation, peatlands 5295
    - forest trees, landscape, forest fragmentation 7280
    - fungal diseases, *Discula destructiva, Cornus florida,* irrigation 4868
    - mycorrhizas, *Pisolithus tinctorius, Pinus rigida,* plant competition 9995
    - *Picea rubens,* geographical distribution, altitude 2138
    - *Pinus rigida*
      - arthropods, forest ecology 7420
      - cones, processing, seed germination 8572
      - progeny testing, increment, height 4832
    - wildlife, birds, rights of way 4922
  - New Mexico
    - broadleaves, plant colonization, streams, salinity 6565
    - conifers, dead wood, estimation 4381
    - forest inventories, forest management 2732
    - forestry, labour 56
    - *Fraxinus pennsylvanica,* remote sensing, canopy, atmosphere, energy relations 1028
    - insect pests, *Phyllonorycter, Quercus grisea × Quercus gambelii,* parasites 5719
    - *Pinus ponderosa,* nitrogen cycle, forest fires, monoterpenes 3636
    - *Populus fremontii,* riparian forests, birds, species diversity 8362
    - *Pseudotsuga menziesii,* foliage, biochemistry, seasonal variation 1281
    - *Tamarix chinensis,* riparian forests, birds, species diversity 8362
    - wildlife, birds, riparian forests, reclamation 4921
    - woodlands, runoff, erosion 5837
  - New York
    - *Abies balsamea,* coniferous forests, soil, acidification 1170
    - acid deposition, soil chemistry, cycling, simulation 3666
    - amenity trees
      - phenology 6390
      - transplanting, survival, seasonal variation 5907
    - birds, *Anas,* habitats 6682
    - broadleaves
      - browsing damage, seedling growth, light 1520
      - forest litter, soil fauna 1924
      - plant competition, old fields 7308
      - soil amendments, lime, seed banks 6898
    - conifers, growth models, climatic change 8705
    - deciduous forests
      - air pollution, deposition 7101

- **USA** *cont.*
  - New York *cont.*
    - deciduous forests *cont.*
      - roots, cycling 2855
      - stand characteristics 2141
        - thinning 2165
    - forests, mosses, pollen analysis, dispersal 3040
    - fungal diseases
      - *Cryphonectria parasitica, Castanea dentata* 8302
      - *Nectria,* deciduous forests 1462
    - insect pests
      - *Lymantria dispar*
        - natural enemies, entomogenous fungi 2336
        - population dynamics, simulation 5709
      - Scolytidae, *Pinus* 5746
    - mycoplasmal diseases, *Fraxinus americana,* epidemiology 5672
    - *Picea rubens*
      - clouds, acid deposition, stand structure 6261
      - coniferous forests, soil, acidification 1170
      - forest decline, acid deposition, soil chemistry 1169
      - frost injury
        - increment 9677
        - solar radiation, aspect 8763
      - heat tolerance, plant physiology, geographical distribution 4478
      - increment, height, liming 3879
      - stand characteristics 3879
    - *Pinus rigida,* dendroclimatology, stand characteristics, increment 6763
    - *Prunus pensylvanica,* stand density, stand development, botanical composition 1781
    - rights of way, plant succession, forest trees 7310
    - *Robinia pseudoacacia,* stem form, taper, allometry 6409
    - *Salix,* short rotation forestry, biomass production 6029
    - *Salix purpurea,* shoot cuttings, rooting, containers 4272
    - *Salix sericea,* genetic variation, insect pests, resistance 7429
    - street trees, ice damage 8460
    - urban areas, amenity and recreation areas, design 8461
    - urban forestry, land use, methodology 4138
    - wildlife
      - deciduous forests, stand characteristics, simulation 4226
      - *Microtus pennsylvanicus,* forest trees, plant succession 5811
  - North Carolina
    - *Abies fraseri*
      - Christmas trees
        - genetic variation
          - increment 3125
          - quality 3125
        - pruning 9556
        - tree breeding, early selection 3126
      - forest decline 2888
      - provenance trials, Christmas trees 4260
    - *Acer rubrum*
      - plant colonization, old fields 3951
      - seed dormancy, genetic variation 7725
      - seeds, plant succession 3029
    - birds, *Picoides borealis, Pinus* (Southern), management 3209
    - broadleaves, clear felling, natural regeneration, species diversity 3121
    - coniferous forests, air pollution, nitrogen 6356
    - conifers, plant competition, altitude 1895
    - deciduous forests
      - drought, synecology, increment 3593

- **USA** *cont.*
  - North Carolina *cont.*
    - deciduous forests *cont.*
      - natural regeneration, canopy gaps 8182
    - forest borders, synecology 3874
    - forest management, simulation 3350
    - insect pests
      - broadleaves, canopy gaps, phenolic compounds 2306
      - *Dendroctonus frontalis, Pinus* (Southern), distribution 4889
      - *Dreyfusia piceae, Abies fraseri,* genetic variation 5686
    - mountain forests, weed control, woody weeds, rights of way 7784
    - peatlands, plant nutrition, use efficiency, simulation 9722
    - *Picea rubens*
      - air pollution, throughfall 2870
      - forest decline, dendrochronology, statistical analysis 5915
    - *Pinus strobus*
      - site preparation, controlled burning, plant physiology 1270
      - wood chemistry, carbon, water stress 7660
    - *Pinus taeda*
      - air pollution
        - ozone 3657
        - plant composition, biomass production 1158
      - biomass, remote sensing, satellites 2762
      - branches, crown, simulation 6187
      - crown, thinning, fertilizers 2011
      - foliage
        - basal area, correlation 2927
        - thinning, fertilizers 2011
      - increment, stand development, simulation 2707
      - remote sensing
        - biomass, soil water 1858
        - radar, biomass 6227
      - tree breeding, early selection, wood density 1430
    - private forestry, timber trade, marketing, simulation 2777
    - *Prunus serotina,* seedling growth, air pollution, ozone 9744
    - *Quercus,* hurricanes, dangerous trees, assessment 3286
    - salamanders, forest trees, clear felling, population dynamics 3195
    - soil biology, Oligochaeta 7929
    - soil chemistry, nitrogen cycle 7887
    - synecology, species diversity, theory 3882
    - wetlands, forest management, hydrology 7546
  - North Central States of USA
    - agroforestry, surveys 3258
    - fungal diseases, *Verticillium dahliae, Fraxinus* 5655
    - shelterbelts, farmers' attitudes 8385
  - North Dakota
    - *Larix sibirica,* forest influences, soil chemistry 8791
    - *Populus deltoides,* forest influences, soil chemistry 8791
  - Northeastern States of USA
    - forest ecology, climatic change, simulation 2790
    - insect pests, *Taeniothrips inconsequens, Acer saccharum,* damage 4034
    - mountain forests, air pollution, heavy metals, soil chemistry 342
    - mycoplasmal diseases, *Fraxinus americana,* forest management 614
    - *Picea abies,* nutrient deficiencies, soil chemistry 2848
    - *Quercus,* forest influences, air pollution, methane 5359
    - remote sensing, radiometry, mapping 3510
  - Ohio
    - *Acer saccharum,* gene flow 3986

- **USA** *cont.*
  - Ohio *cont.*
    - *Alnus*, provenance trials, frost resistance, pest resistance 4255
    - broadleaves, phenology, prediction, simulation 387
    - deciduous forests, cycling, understorey, soil fertility 3619
    - *Ginkgo biloba*, nitrogen fertilizers, plant nutrition 1709
    - *Quercus rubra*, planting stock, genetic variation 5112
  - Oklahoma
    - birds, *Picoides borealis*, stand structure 8367
    - *Fraxinus pennsylvanica*, planting stock, survival, growth 4309
    - mixed forests, soil chemistry, logging, controlled burning 9689
    - *Pinus echinata*
      - direct sowing, site preparation, burning 4340
      - height, site class assessment 5178
      - planting stock, protection 6084
    - *Pinus taeda*
      - foliage, climate, stand development 6977
      - tree breeding, early selection, wood density 1430
    - *Quercus*, woodlands, birds, nesting 6679
    - streams, chemistry, silviculture 9235
  - Oregon
    - *Abies lasiocarpa*, cones, climate, increment 2098
    - *Abies magnifica*, soil properties 7918
    - *Acer macrophyllum*, woody weeds, herbicides, statistical analysis 9515
    - *Alnus rubra*, thinning, increment 5150
    - *Arctostaphylos viscida*, roots, soil physical properties, soil parent materials 4486
    - birds, forest fragmentation 9211
    - climate 8754
    - coniferous forests
      - biomass, remote sensing, simulation 1042
      - biomass production, climate 1339
      - clear felling, landscape 4132
      - foliage, plant nutrition 1346
      - forest decline 7201
      - leaf area index, remote sensing 1342
      - plant composition, remote sensing 1045, 1344
      - remote sensing
        - simulation 1853
        - synecology, simulation 1338
      - stand age, soil chemistry 8774
      - stand characteristics, remote sensing 1345
      - synecology
        - climate, simulation 1340
        - remote sensing, simulation 1347
    - conifers
      - advance growth, increment 152
      - clear felling, forest borders, stand characteristics 1333
      - dead wood, decomposition 4497
      - forest litter, decomposition, hydrology 7897
      - respiration 5412
    - *Cupressus bakeri*
      - cones, genetic variation, taxonomy 2198
      - foliage, genetic variation, taxonomy 2198
    - deciduous forests, herbicides, glyphosate, residues 5143
    - erosion, forest fires, soil fungi, mycorrhizas 2243
    - fishes, water quality, conifers, forest ecology 2170
    - forest fires, fire suppression, simulation, costs 2001
    - forest litter, streams 6290
    - forest management, national forests, public opinion 1647

- **USA** *cont.*
  - Oregon *cont.*
    - forest trees
      - roots, soil physical properties, soil parent materials 4486
      - soil water, measurement, time domain reflectometry 9688
    - forestry, forest management, public opinion 7701
    - fungal diseases
      - *Armillaria ostoyae*, conifers, thinning 10008
      - *Discula quercina, Quercus garryana*, infection 5656
      - *Heterobasidion annosum, Abies* 607
      - *Melampsora medusae, Populus*, mortality 4871
      - *Phellinus weirii*
        - *Pseudotsuga menziesii*
          - stand characteristics 4856
          - urea fertilizers 4299
      - *Phytophthora, Abies procera*, Christmas trees 9097
      - *Septoria populicola, Populus trichocarpa* 8308
      - *Valdensinia heterodoxa*, Ericaceae 4870
    - fungicides
      - nontarget effects, ground vegetation, *Pseudotsuga menziesii* 6640
      - translocation, *Pseudotsuga menziesii* 6639
    - insect pests
      - Coleoptera, *Pseudotsuga menziesii* 7478
      - *Coloradia pandora, Pinus ponderosa*, thinning 9148
      - *Dendroctonus pseudotsugae*
        - *Pseudotsuga menziesii*, pheromone traps 5735
        - trapping 8340
      - Scolytidae, *Pseudotsuga menziesii*, attractants 4893
    - *Juniperus occidentalis*
      - foliage, juvenility, plant physiology 9791
      - forest influences, soil chemistry, nutrients 6372
      - plant colonization, history 6564
    - land use, multiple use, forest policy, simulation 2515
    - land use planning, geographical information systems, social behaviour 8399
    - landslides, logging, storms, simulation 9768
    - *Lithocarpus densiflorus*, thinning, canopy 4356
    - mammals
      - *Thomomys*
        - control 9228
        - vegetation 7918
    - mycorrhizas
      - forest trees, forest ecology 6610
      - *Pseudotsuga menziesii*, forest litter 5567
    - ornamental woody plants, silvicultural characters 8456
    - *Pinus*, photosynthesis, age of trees, senescence 2992
    - *Pinus contorta*, logs, decomposition, cycling 2826
    - *Pinus ponderosa*
      - forest nurseries, lifting, storage 907
      - genetics, inbreeding 569
      - remote sensing, radiometry, reflectance 4452
      - understorey
        - remote sensing 1343
          - video cameras 5204
    - private forestry, logging, socioeconomics 5987
    - protection forests, riparian forests, design 4930
    - *Pseudotsuga menziesii*
      - branches, forest litter, stand density 4500

- **USA** *cont.*
  - Oregon *cont.*
    - *Pseudotsuga menziesii cont.*
      - dendroclimatology, increment 10161
      - forest management, decision making, computer techniques 1623
      - forest plantations, increment, forest borders 3483
      - frost injury, cold hardening, simulation 1888
      - genetic variation
        - biomass, increment 2182
        - cambium, phenology 4828
        - plant morphology, increment 2183
      - growth models 8509
        - plant competition, weed control 2710
      - increment, nitrogen fertilizers, soil chemistry 3418
      - lammas growth, genetic variation, drought 4654
      - light penetration, measurement 4472
      - planting
        - soil treatment
          - mycorrhizas 3156
          - soil biology 3156
      - seed banks, logging, burning 3056
      - seed orchards, spacing 4265
      - site preparation, pesticides, seedling growth, mortality 3589
      - soil chemistry, site class assessment 1903
      - soil fertility, fertilizers, DRIS 8794
      - stand tables, interspecific competition, weed control 2709
      - tree breeding
        - genetic variation, seedling growth 9968
        - wood density, phenology 4829
      - understorey, development, *Acer circinatum* 5452
      - volcanic soils, nutrient deficiencies 7053
      - woody weeds
        - weed control
          - economic evaluation 171
          - simulation 171
    - remote sensing, satellites, vegetation, spectral analysis 1043
    - riparian vegetation
      - forest management, forest economics, simulation 3501
      - natural regeneration, forest influences, streams 2170
    - root nodules, *Frankia, Alnus rubra*, forest nurseries 2231
    - soil density, clear felling, tractors, damage 2810
    - stand characteristics, forest ownership, remote sensing, classification 6223
    - synecology, climate, simulation, diurnal variation 1341
    - *Taxus brevifolia*
      - bark, damage, increment 1005
      - medicinal plants
        - bark, taxane 417
        - foliage, taxane 417
    - *Tsuga heterophylla*
      - foliage, biochemistry, seasonal variation 1281
      - growth rings, wood density 1178
      - soil chemistry, site class assessment 1903
    - *Tsuga mertensiana*, cones, climate, increment 2098
    - vegetation types, biomass production, climate, remote sensing 2691
    - virgin forests, area, estimation 2730
    - voles
      - *Clethrionomys californicus*
        - forests, fragmentation 7528
        - *Pseudotsuga menziesii*
          - habitats 7522
          - truffles 7521

- **USA** *cont.*
  - Oregon *cont.*
    - wildlife, birds, forest management, multiple use 8365
  - Pacific Northwest States of USA
    - *Acer macrophyllum*
      - control, forest plantations 4349
      - plant competition, *Pseudotsuga menziesii,* increment 5140
    - *Arbutus menziesii,* roots, morphology, adaptation 9794
    - *Arctostaphylos viscida,* roots, morphology, adaptation 9794
    - birds
      - dead trees, vegetation types, surveys 4902
      - *Strix occidentalis,* conservation, forest economics 732
      - *Strix occidentalis caurina,* nature conservation, forest economics 5820
    - coniferous forests, climatic change, simulation 3542
    - dead trees, ecology, aquatic environment, books 4156
    - forest management
      - landscape 4133
      - sustainability, logging 1846
    - forest policy, development 6853
    - forest trees, biogeochemistry, cycling 2814
    - fungal diseases, *Melampsora medusae,* conifers 5659
    - *Melampsora larici-populina,* conifers 5659
    - old-growth forests, environmental management, economics 9398
    - *Pseudotsuga menziesii*
      - forest borders
        - air temperature, simulation 2793
        - microclimate 5347
      - increment, plant competition, *Acer macrophyllum* 5140
      - silviculture, forest economics, wood properties 5214
    - riparian forests, reclamation, forest economics, simulation 5850
    - *Tsuga heterophylla,* spacing, branches, diameter 4350
  - Pacific States of USA
    - forest management, biodiversity, nature conservation, reviews 8438
    - *Lithocarpus densiflorus,* volume determination, equations, geographical variation 6163
  - Pennsylvania
    - *Acer saccharum,* marking, paints, damage 2894
    - birds
      - ecology, clear felling 3216
      - herbicides, rights of way, woody weeds 165
    - broadleaves
      - foliage, morphology, plant physiology 4692
      - light intensity, crown, development 2014
      - plant physiology, drought, plant ecological groups 8813
      - understorey, plant succession, botanical composition 4783
      - weed control, herbicides 942
    - deciduous forests
      - acid deposition
        - increment, site factors 2693
        - mortality, site factors 2693
      - canopy gaps, roots, distribution 3109
      - history, soil properties, botanical composition 9916
      - site preparation, herbicides, natural regeneration 4341
      - stand characteristics, population dynamics, height 9961
    - forest borders, synecology, plant succession 3098
    - forest trees
      - forest influences, throughfall 2903

- **USA** *cont.*
  - Pennsylvania *cont.*
    - forest trees *cont.*
      - gas exchange, leaf water potential, drought 4709
    - fungal diseases
      - *Discula campestris, Acer saccharum,* control 2254
      - *Nectria,* deciduous forests 1462
    - insect pests
      - *Lymantria dispar*
        - natural enemies, entomogenous fungi 2336
        - *Quercus*
          - defoliation 3725
          - resistance 7446
        - simulation, population dynamics 9151
      - *Taeniothrips inconsequens, Acer saccharum,* control 2254, 4033
    - *Larix,* progeny testing 4254
    - old-growth forests
      - plant succession, botanical composition 9951
      - wind damage, canopy gaps 6567
    - plant succession, stand characteristics 3054
    - private forestry, forest management, attitudes 7703
    - *Prunus serotina*
      - forest litter, decomposition, streams 7898
      - ozone, uptake, damage 7985
    - *Pyrus calleryana,* street trees, growth, assessment 4986
    - *Quercus*
      - canopy, solar radiation, defoliation 3725
      - insecticide residues, diflubenzuron 9199
      - logging, understorey, ferns 1392
    - *Quercus coccinea,* fertilizers, lime, dendrochronology, wood chemistry 1590
    - *Quercus rubra,* photosynthesis, plant water relations, foliage 1265
  - Rhode Island
    - *Chamaecyparis thyoides,* nutrient uptake, translocation, peatlands 5295
    - forests, mosses, pollen analysis, dispersal 3040
    - *Quercus ilicifolia,* defoliation, plant nutrition, cycling 322
    - riparian forests, water pollution, nitrates, nitrogen cycle 2890
  - South Carolina
    - birds
      - *Aimophila aestivalis*
        - endangered species, forest management 5817
        - forest fragmentation, population ecology 9217
    - bottomland forests, natural regeneration 551
    - forest fires, wind damage 2912
    - forest influences, watersheds, hydrology 3685
    - insect pests, *Rhyacionia frustrana, Pinus taeda,* population dynamics 5728
    - mixed forests, population dynamics 3965
    - *Pinus,* species trials 5053
    - *Pinus taeda*
      - biomass
        - plant composition 8708
        - roots, measurement 8501
      - crown, thinning, fertilizers 2011
      - cycling, forest influences 5355
      - foliage, thinning, fertilizers 2011
      - forest decline, afforestation, mine spoil 2092
      - planting stock, floodplains 5127
      - soil chemistry, flooding, sea water 1069
      - stand density, stand characteristics, increment 947
      - thinning 6128

- **USA** *cont.*
  - South Carolina *cont.*
    - *Pinus taeda cont.*
      - wind damage
        - crown, simulation 9680
        - plant water relations, wood strength 1061
    - *Quercus,* photosynthesis, water use efficiency, plant nutrition 6483
    - salvage felling and logging, soil properties, wetlands 4579
    - site preparation, burning, runoff 5134
    - *Taxodium distichum,* increment, soil water regimes, road construction 7063
    - wind damage 1079
  - South Dakota
    - *Juniperus,* provenance trials, shelterbelts 8562
    - *Pinus ponderosa*
      - canopy gaps
        - forest management, forest pests 8986
        - stand structure
          - analysis 8987
          - forest management 8666
      - provenance trials 2550
    - vegetation, species diversity, sampling 9349
  - Southeastern States of USA
    - birds, *Aimophila aestivalis, Pinus taeda,* forest management, simulation 6990
    - *Cupressocyparis leylandii,* Christmas trees 9558
    - fungal diseases, *Discula destructiva, Cornus florida,* statistical analysis 9351
    - *Pinus elliottii*
      - seeds, fungal diseases 9089
      - site class assessment, volume determination, estimation 2686
    - *Pinus taeda*
      - crown, thinning, simulation 5148
      - rotations, forest economics, simulation 6990
    - shade trees, evaluation 8457
    - urban forestry, choice of species, expert systems 2434
    - volume tables, *Pinus* (Southern) 6174
    - wind, simulation, smoke, movement 3695
  - Southern Plains States of USA, birds, *Vireo atricapillus,* scrub, habitats 4925
  - Southern States of USA
    - bottomland forests, biogeochemistry, logging 7270
    - broadleaves, nutrient reserves, bottomland forests 3626
    - climatic change, simulation 2507
    - deer
      - *Odocoileus virginianus*
        - browse 10059
          - plant succession 5827
    - farm forestry, investment, economic analysis, computer techniques 37
    - forest inventories, mathematics 1025
    - forest management
      - decision making, bottomland forests, simulation 5213
      - economics, stand structure 772
      - forest ownership, opinions 1645
      - planning, valuation, non-market benefits 5192
    - forest recreation, research, conferences 2468
    - fungal diseases
      - *Cronartium fusiforme*
        - *Pinus,* silviculture 10021
        - *Pinus taeda,* tree breeding 7346
    - grading, trees, forest inventories 1815
    - growth models, computer software 802
    - insect pests
      - deciduous forests, damage, simulation 1475

- **USA** *cont.*
  - Southern States of USA *cont.*
    - insect pests *cont.*
      - *Dendroctonus frontalis,* forest management 10056
      - *Lymantria dispar* 5704
      - *Pinus,* seed orchards, control 4045
    - *Juglans nigra,* forest plantations, economics, returns 5212
    - land classification, forest management, conferences 2469
    - *Magnolia,* genetic variation, isoenzymes 579
    - *Pinus echinata,* regeneration 2464
    - *Pinus elliottii,* seed orchards, seed production 3377
    - *Pinus palustris*
      - growth models, thinning 4393
      - silviculture, conferences 771
      - site class assessment, simulation 1006
    - *Pinus* (Southern), forest plantations, short rotation forestry, wood properties 2459
    - *Pinus taeda*
      - forest plantations, plant competition, thinning 2122
      - silviculture, forest economics, regeneration 954
      - site class assessment, simulation 1823
      - stand density, logging, simulation 3493
    - silviculture, conferences 2465, 2471
    - stem form, taper, equations 995
    - technology transfer 4246
    - thinning, bibliographies 2457
    - wetlands
      - biomass production, soil water regimes 6963
      - environmental impact 7082
      - forest management 6799
      - logging, ecology 8152
      - silviculture, water quality 7545
    - wildlife
      - bottomland forests, forest management 7513
      - *Ursus americanus,* habitats, assessment 4074
  - Tennessee
    - air pollution, damage, national parks 8444
    - broadleaves, carbon dioxide enrichment, drought, plant physiology 5406
    - deciduous forests
      - nitrogen cycle, topography 2847
      - plant succession, site factors 3096
    - forest trees, soil chemistry, nitrogen, foliage, chemistry 3576
    - landscape, biodiversity, analysis 3283
    - mixed forests
      - carbon cycle, forest influences, atmosphere 5356
      - plant succession, site factors 3096
      - synecology, canopy gaps, plant succession 3101
    - *Pinus taeda,* air pollution, ozone, water stress, increment 7199
    - private forestry, forest management, incentives 4245
    - *Quercus,* foliage, air pollution, organic compounds 7105
    - site types, site class assessment 1875
    - stand characteristics, landscape, sampling, variation 2166
    - stream training, riparian forests, plant succession 543
  - Texas
    - *Acacia berlandieri,* browse, foliage, chemistry 9823
    - birds
      - *Colinus virginianus,* habitats 6671
      - *Picoides borealis*
        - management, population dynamics 9209
        - *Pinus,* habitats 5179
        - *Pinus palustris,* cavities in trees 4070
    - bottomland forests, dead trees, birds, feeding behaviour 6680

- **USA** *cont.*
  - Texas *cont.*
    - broadleaves, reclamation, mined land, establishment 4090
    - deer, *Odocoileus virginianus,* browse, management 3201
    - forest trees, stand structure, stability 550
    - fungal diseases
      - *Ceratocystis fagacearum*
        - *Quercus,* resistance 4862
        - *Quercus virginiana*
          - control 4877
          - tree breeding 1457
      - *Cronartium fusiforme*
        - *Pinus,* assessment 3167
        - *Pinus elliottii,* simulation 7676
      - *Lasiodiplodia, Prosopis* 10003
      - *Pestalotiopsis, Prosopis* 10003
    - *Juniperus ashei,* gas exchange, seasonal variation, precipitation 1263
    - *Juniperus pinchotii,* forest influences, ground vegetation, soil types 6556
    - palaeoecology, mangrove swamps 6529
    - *Paulownia,* provenance trials 3366
    - *Pinus*
      - controlled burning, stand characteristics, forest recreation 6378
      - growth models, height 5179
      - microclimate, clear felling 5349
    - *Pinus echinata*
      - gas exchange
        - acid deposition 340
        - air pollution, ozone 340
    - *Pinus eldarica*
      - planting stock
        - explants, increment 1688
        - seedlings, increment 1688
    - *Pinus taeda*
      - shelterwood system
        - microclimate, equations 2787
        - plant water relations, microclimate 5277
      - silvicultural systems, microclimate 922
    - *Prosopis,* progeny testing, species trials, biomass production 3137
    - *Prosopis glandulosa,* increment, plant competition, grasses 9013
    - *Quercus gravesii,* forest litter, fungi, crystals 8251
    - *Quercus havardii*
      - seedling growth
        - soil biology
          - Formicidae 5272
          - mycorrhizas 5272
    - *Quercus virginiana*
      - gas exchange, seasonal variation, precipitation 1263
      - irrigation, mined land, reclamation 4091
    - reclamation, mined land 3231
    - *Sapium sebiferum,* woody weeds, biomass production, controlled burning 2696
    - woody weeds, *Prosopis,* biological control, laboratory tests 167
  - Utah
    - *Abies lasiocarpa,* branches, growth rings, biomass 2963
    - *Betula occidentalis,* plant water relations, transpiration 8805
    - broadleaves, plant water relations, precipitation 6303
    - forest trees
      - forest economics
        - nature conservation, simulation 1870
        - silvicultural systems, simulation 1870
      - water stress, cavitation 4522
    - insect pests
      - *Dendroctonus ponderosae, Pinus contorta,* growth effects 7205
      - *Lymantria dispar,* simulation, population dynamics 9151

- **USA** *cont.*
  - Utah *cont.*
    - insect pests *cont.*
      - *Orgyia pseudotsugata, Abies lasiocarpa,* damage 7459
      - *Rabdophaga, Salix exigua* 7495
    - *Juniperus,* woodlands, erosion, remote sensing 709
    - *Juniperus osteosperma,* plant water relations, plant nutrition, nitrogen 4505
    - mistletoes, *Phoradendron juniperinum, Juniperus osteosperma,* plant physiology 3800
    - *Pinus contorta*
      - injuries, oleoresins, growth effects 7206
      - plant diseases, plant composition, *Dendroctonus ponderosae* 7205
    - *Pinus edulis*
      - plant water relations, plant nutrition, nitrogen 4505
      - woodlands, erosion, remote sensing 709
    - *Populus,* hybrids, insect pests 6594
    - wildlife, *Erethizon dorsatum, Quercus gambelii,* resource utilization 6675
    - woodlands, plant succession, grazing intensity 2385
  - Vermont
    - *Acer saccharum*
      - forest decline, soil chemistry, plant composition 9860
      - photosynthesis, plant nutrition, soil pH 4710
    - broadleaves, shelterwood system, natural regeneration 146
    - forest trees, stumpage value, forest ownership, analysis 2778
    - fungal diseases, *Nectria,* deciduous forests 1462
    - insect pests, *Taeniothrips inconsequens, Acer saccharum,* plant physiology 1477
    - *Picea rubens*
      - foliage, cold injury, damage 7036
      - injuries, defence mechanisms, geographical variation 8110
      - photosynthesis, winter, genetic variation 7196
      - plant physiology, climatic factors 8934
    - plant communities, indicator plants, methodology, statistical analysis 7287
    - plant parasitic nematodes, *Bursaphelenchus xylophilus, Pinus sylvestris* 9180
    - vesicular arbuscular mycorrhizas, *Acer saccharum,* forest decline, soil chemistry 10001
    - water quality, logging, effects 347
    - woody weeds, *Lonicera tatarica,* forests, natural regeneration 5473
  - Virginia
    - birds
      - forest ecology, predators 3198
      - riparian forests 4073
    - broadleaves
      - dendrochronology, synecology, increment 5914
      - weed control, herbicides, equipment 4345
    - coniferous forests, land use, synecology, history 2408
    - deciduous forests, land use, synecology, history 2408
    - forest fires, damage, fire behaviour, statistical analysis 6381
    - forest health 2729
    - forest management, wildlife, simulation 6991
    - insect pests
      - *Dreyfusia piceae, Abies fraseri,* genetic variation 5686
      - *Lymantria dispar*
        - forest trees, physical control 7498
        - monitoring 2324

- **USA** *cont.*
  - Virginia *cont.*
    - insect pests *cont.*
      - *Lymantria dispar cont.*
        - natural enemies, entomogenous fungi 2336
        - *Quercus,* control 5799
        - sampling, management 5720-5721
        - simulation, population dynamics 9151
    - *Liquidambar styraciflua,* fruiting, control, plant growth regulators 7606
    - *Myrica cerifera*
      - plant succession, islands, formation 8172
      - thicket, transpiration, simulation 8815
    - *Picea rubens*
      - acid deposition, ozone, interactions 3667
      - nutrient deficiencies 3639
    - *Pinus,* natural regeneration, forest fires, soil chemistry 381
    - *Pinus taeda*
      - branches, crown, simulation 6187
      - foliage, basal area, correlation 2927
      - increment, stand development, simulation 2707
      - mixed forests, roots, distribution 6425
    - *Quercus,* stand characteristics 3936
    - reclamation, mined land, plant succession, botanical composition 4094
  - Washington
    - *Abies amabilis*
      - forest decline, volcanic ash 1995
      - forest litter, decomposition, volcanic ash 1098
      - photosynthesis, light, acclimatization 8930
    - *Abies grandis,* fertilizers, sewage sludge, nutrient deficiencies 3406
    - *Abies lasiocarpa*
      - cones, climate, increment 2098
      - forest fires, natural regeneration, climate 1416
    - *Acer macrophyllum,* woody weeds, herbicides, statistical analysis 9515
    - *Acer platanoides,* street trees, light 8459
    - *Alnus rubra*
      - short rotation forestry, flowering, growth 9869
      - soil chemistry, nitrates 3577
    - birds, *Strix occidentalis,* nesting, habitats 6684
    - coniferous forests
      - degraded forests, exotics, invasion 3870
      - forest fires, plant succession 7136
    - conifers
      - clear felling, forest borders, stand characteristics 1333
      - dendroclimatology, increment, climate 4990
      - forest litter, respiration 4496
      - plant succession, seral stages, increment 4792
      - understorey, volcanoes, damage 539
    - forest management
      - planning, forest recreation 4425
      - private forestry, timber supply 5040
    - forest trees
      - sewage, soil chemistry 896
      - soil water, measurement, time domain reflectometry 9688
    - fungal diseases
      - *Armillaria ostoyae,* conifers, thinning 10008
      - *Phytophthora, Abies procera,* Christmas trees 9097
      - *Septoria populicola, Populus trichocarpa* 8308

- **USA** *cont.*
  - Washington *cont.*
    - fungal diseases *cont.*
      - *Valdensinia heterodoxa,* Ericaceae 4870
    - insect pests, *Rhagoletis pomonella, Crataegus,* parasitoids 5771
    - land use, multiple use, forest policy, simulation 2515
    - *Liquidambar styraciflua,* street trees, electrical phenomena in trees, measurement 778
    - logging
      - damage, soil physics 349
      - landscape, assessment 4977
    - mammals, *Thomomys,* control 9228
    - mountain forests, watersheds, streams, morphology 6698
    - old-growth forests, biogeochemistry 8825
    - ornamental woody plants, silvicultural characters 8456
    - *Pinus ponderosa,* genetics, inbreeding 569
    - *Populus*
      - biomass production 1835
      - shoot cuttings, roots, development 2031
      - short rotation forestry, growth models, photosynthesis 1619
    - *Populus interamericana,* canopy, water uptake, transpiration 1932
    - *Populus trichocarpa,* seedling growth, survival, genetic variation, stress factors 3996
    - private forestry, forest management, education, surveys 53
    - protection forests, riparian forests, design 4930
    - *Pseudotsuga menziesii*
      - fertilizers
        - sewage, soil chemistry 894
        - sewage sludge, nutrient deficiencies 3406
      - forest litter, decomposition, volcanic ash 1099
      - forest plantations
        - provenance, genetic variation 5488
        - weed control, *Alnus rubra* 1764
      - frost injury, cold hardening, simulation 1888
      - growth models 8509
        - plant competition, weed control 2710
      - increment, nitrogen fertilizers, soil chemistry 3418
      - light penetration, measurement 4472
      - natural regeneration, volcanoes, dendrochronology 363
      - soil chemistry
        - nitrates 3577
        - site class assessment 1903
      - soil fertility, fertilizers, DRIS 8794
      - stand structure, microclimate 3459
      - stand tables, interspecific competition, weed control 2709
    - root nodules, *Frankia, Alnus rubra,* forest nurseries 2231
    - site preparation, burning, soil properties, coniferous forests 9507
    - *Taxus brevifolia,* bark, damage, increment 1005
    - *Tsuga heterophylla*
      - growth rings, wood density 1178
      - soil chemistry, site class assessment 1903
    - *Tsuga mertensiana,* cones, climate, increment 2098
    - wildlife, small mammals, forest management 7517
  - West North Central States of USA, forest resources, climatic change, simulation 3543
  - West Virginia
    - broadleaves
      - forest litter, decomposition 3584
      - stem form 8692

- **USA** *cont.*
  - West Virginia *cont.*
    - broadleaves *cont.*
      - streams, forest litter, decomposition 8781
      - volume determination, taper, estimation 4382
    - deer, *Odocoileus virginianus, Abies balsamea,* browsing damage 3203
    - *Fagus grandifolia,* genetic variation, isoenzymes 8240
    - forest inventories, forest ownership 3351
    - fungal diseases, *Nectria,* deciduous forests 1462
    - insect pests
      - *Formica exsectoides,* forest trees, control 666
      - *Lymantria dispar*
        - birds 3179
        - monitoring 2324
        - simulation, population dynamics 9151
    - insecticides, diflubenzuron, nontarget organisms, Vespidae 7505
    - plant succession, trees, mined land 3948
    - virgin forests, plant succession, dendrochronology 6562
  - Western States of USA
    - agroforestry, sustainability 9322
    - birds, riparian forests, nature conservation 4127
    - coniferous forests, air pollution, ozone, geographical variation 8835
    - edible fungi 5165
    - *Juglans nigra,* provenance trials, genetics 5059
    - *Juniperus occidentalis,* plant colonization, palaeoecology 9917
    - *Picea,* genetic variation 2184
    - *Pseudotsuga menziesii,* nitrogen fertilizers, growth 128
  - Wisconsin
    - *Acer saccharum,* air pollution, photosynthesis, canopy 9752
    - birds, *Bonasa umbellus,* food preferences, winter 9207
    - broadleaves
      - crown, competition, growth 2692
      - street trees, pruning, wood residues 4983
    - conifers, respiration 5412
    - forest management, landscape ecology, biodiversity 4130
    - forest trees, uprooting, soil properties 8869
    - fungal diseases, *Discula campestris, Acer saccharum* 5658
    - insect pests
      - *Choristoneura pinus, Pinus banksiana,* population dynamics 1482
      - *Ips pini, Pinus* 7482
      - *Pissodes strobi, Pinus strobus* 924
    - landscape, perception, forest recreation 5900
    - landscape ecology 1587
    - *Liquidambar styraciflua,* nitrogen fertilizers, cycling, foliage 8823
    - mixed forests
      - dead wood, decomposition 3587
      - pollen analysis, palaeoecology 8992
    - old-growth forests, landscape, disturbance, plant succession 6568
    - palaeoecology 4758
    - *Pinus resinosa,* roots, nutrient allocation, carbon 7076
    - *Pinus strobus,* stand characteristics 5445
    - *Populus,* short rotation forestry, growth models, photosynthesis 1619
    - *Quercus,* natural regeneration, understorey, canopy 3118
    - *Quercus rubra,* coppice, plant physiology 4686

- **USA** *cont.*
  - Wisconsin *cont.*
    - Salicaceae, wetlands, plant succession 2157
  - Wyoming
    - conifers, light, interception, plant morphology 3733
    - deer
      - *Cervus elaphus,* forest fires, feeding behaviour 3200
      - *Salix,* browsing damage 5826
    - forest fires, history, vegetation types, mountain areas 7131
    - forest litter, forest fires, streams 4498
    - *Pinus contorta*
      - canopy, structure, light penetration 3553
      - canopy gaps, size, soil chemistry 1143
      - cones, fire effects, natural regeneration 1200
      - fire effects, natural regeneration, landscape ecology 1200
      - mycorrhizas, synecology, canopy gaps 4013
      - plant nutrition, soil chemistry, biomass 9730
    - *Populus,* landscape, water management 7549
    - streams, logging, damage, ecology 4936
    - synecology, avalanches, snow 2911
    - vegetation types, palynology 3881
    - wildlife, browsing damage, riparian forests 7543
- **USSR** (Retained for papers on the whole of or unspecified locations in the former USSR; *see also* separate republics)
  - forest recreation 1586
  - land use, remote sensing 5209
  - palaeoecology, reviews 6530
  - *Pinus,* genetic variation, isoenzymes 5514
  - plant parasitic nematodes, *Bursaphelenchus xylophilus,* conifers, spread, risk 9183
  - vegetation types, remote sensing 5209
- ***Uvaria cordata,*** endangered species, Sri Lanka 10123
- **Uzbekistan,** insect pests, Coleoptera, *Ulmus minor,* control 657
- ***Vaccinium alaskaensis,*** fungal diseases, *Valdensinia heterodoxa,* USA 4870
- ***Vaccinium caespitosum,*** vegetation management, controlled burning, edible species, Canada 374
- ***Vaccinium membranaceum***
  - fungal diseases, *Valdensinia heterodoxa,* USA 4870
  - vegetation management, controlled burning, edible species, Canada 374
- ***Vaccinium meridionale,*** plant colonization, landslides, Jamaica 4793
- ***Vaccinium myrtillus***
  - browsing damage, biomass production, Finland 966
  - fertilizers, lime, Germany 8591
  - forest litter
    - decomposition, phenolic compounds, France 5259
    - measurement, decomposition, nutrients, Sweden 9702
  - habit, canopy, Finland 8039
  - plant physiology, biochemistry, stress factors, research 6494
- ***Vaccinium vitis-idaea***
  - flowering, Ukraine 481
  - habit, canopy, Finland 8039
- ***Valdensinia heterodoxa,*** fungal diseases, Ericaceae, USA 4870
- ***Vallea stipularis,*** choice of species, forestry development, South America, handbooks 2551
- ***Valsa ceratosperma,*** fungal diseases, *Eucalyptus grandis,* pathogenicity 2271
- ***Valsa sordida,*** fungal diseases, *Populus,* frost resistance, genetic variation 10009
- **Valuation**
  - afforestation, amenity and recreation areas, Spain 8448
  - equations 9656
- **Valuation** *cont.*
  - estimation, forest economics, methodology, France, *Pseudotsuga menziesii* 7020
  - forest economics
    - estimation, income, returns 9646
    - Italy, history 6246
    - nature conservation
      - Australia 3533
      - simulation models, Norway 5218
    - theory, analysis 7858
  - forest inventories, remote sensing, satellites, Sweden 5216
  - forest management
    - decision making, Australia 7017
    - forest economics, Sweden 1053
  - forest recreation
    - Germany 8744
    - Sweden 8745
  - forest resources, carbon cycle, Developing Countries 3686
  - forests
    - Mexico 9649
    - nature conservation, computer techniques, UK 5892
  - Germany, methodology 4458
  - mangrove forests, Sarawak 3086
  - multiple use, Switzerland 264
  - national accounting, forest plantations, New Zealand 7705
  - nature conservation, forests, Developing Countries 5967
  - non-wood forest products, forest economics, Canada, reviews 4456
  - *Pinus nigra,* computer techniques, France 1050
  - rain forests, non-wood forest products, Ecuador 2782
  - rights of way, Germany 9658
  - taxes, legislation, Germany 9657
- **Vanuatu**
  - forestry development, sustainability, agroforestry, land use, indigenous knowledge 9255
  - *Santalum* 4168
- **Vapour pressure,** *Eucalyptus tetrodonta,* photosynthesis, carbon dioxide enrichment, light, temperature 8937
- **Variety trials**
  - *Cupressus sempervirens,* site factors, plant morphology, Mediterranean Region 6020
  - *Leucaena*
    - biomass production
      - cutting, Brazil 7723
      - Venezuela, nutritive value 5061
    - fodder, Brazil 8568
    - Kenya 5060
  - *Leucaena leucocephala*
    - Cuba, morphology, growth 6873
    - direct sowing, seed germination, Cuba, growth 6872
    - India 1652
  - *Populus*
    - clones, India 62
    - India 1654
  - *Populus deltoides*
    - forest nurseries, India 9418
    - India 1655, 2557
    - salt tolerance, pot experimentation 9417
  - *Prosopis juliflora,* increment, plant morphology, India 1662
  - *Sesbania sesban,* fodder, production, Ethiopia 9560
- ***Vatairea lundellii,*** rain forests, Mexico, wood anatomy 1211
- ***Vatica sumatrana***
  - mycorrhizas
    - *Boletus,* nutrient uptake, seedlings 1448
    - *Russula,* nutrient uptake, seedlings 1448
    - *Scleroderma columnara,* nutrient uptake, seedlings 1448
- ***Vaughania,*** taxonomy, Madagascar 9893
- ***Vaughania dionaeifolia,*** taxonomy, Madagascar 9893
- **Vegetation**
  - atmosphere
    - precipitation
      - India, simulation 9759
      - Tropics, simulation 9759
  - chlorophyll, remote sensing, phenology, Africa, simulation 9631
  - classification
    - landscape ecology 9341
    - remote sensing 7012
      - USA 7011
  - degradation
    - *Shorea robusta,* synecology, India 1366
    - Sudan 1399
  - ecology, management, forests, weed control, conferences 7638
  - flora, Cape Verde, maps 9908-9909
  - forest trees, pollen, simulation, USA 4805
  - history
    - *Casuarina*
      - groundwater, Australia 2126
      - soil salinity, Australia 2126
    - charcoal, soil formation, Switzerland 4760
    - deciduous forests, soil properties, USA, botanical composition 9916
    - forest trees, pollen analysis, Austria 7261
    - palaeobotany, Australia, books 6770
    - *Picea abies,* palaeoecology, dendrochronology, Sweden 7613
    - *Picea mariana,* treelines, Canada 514
    - pollen analysis
      - carbon cycle, Europe 2125
      - climate, New Zealand 3886
      - climatic change, Canada, simulation 2124
      - conferences 17
      - deforestation, UK 4763
      - palaeoecology
        - simulation, theory 2128
        - Spain 2133
        - UK 3062
      - plant succession, palaeobotany, Finland 3063
  - landslides, Puerto Rico, spatial variation, site factors 9767
  - palaeoecology, pollen analysis, UK 8145
  - pollen analysis, climate, history, USA 513
  - population dynamics, land use, USA, history 716
  - reflectance, remote sensing, multispectral imagery, climate, Australia 1867
  - remote sensing
    - data processing 5206
    - radar, theory 3520
    - satellites
      - climate, conferences 4178
      - USA, spectral analysis 1043
  - roots, carbon dioxide enrichment, synecology, books, conferences 6798
  - soil types, geology, geomorphology, erosion, Spain 7859
  - Spain, ecology, management, conferences 776
  - species trials, reclamation, sodic soils, India 712
  - surveys
    - broadleaves, soil types, Italy 303
    - *Cryptomeria japonica,* soil types, Japan 7279
    - fire prevention, Italy 8876
    - forest plantations, species diversity, Italy 1744
    - matorral, Mexico 241
  - synecology, maps, Nepal 1371
  - woody plants, maps, remote sensing, multispectral imagery, Zimbabwe 7846
- **Vegetation management**
  - *Pinus contorta,* controlled burning, edible species, Canada 374
  - *Populus tremuloides,* controlled burning, edible species, Canada 374
  - *Vaccinium,* controlled burning, edible species, Canada 374

- **Vegetation types**
  - *Abies concolor,* stand characteristics, USA 7281
  - *Acacia*
    - climate, landscape, Kenya 2156
    - Morocco 9921
  - *Acer saccharum,* landscape ecology, Canada 3910
  - acid deposition, monitoring, USA 4781
  - *Alnus glutinosa,* soil types, Russia 300
  - alpine vegetation
    - air pollution, throughfall, soil chemistry, Europe 5321
    - Canary Islands 3930
  - Argentina 1552
  - Arid Regions, xerophytes, stand structure, natural regeneration, Madagascar 8998
  - *Aspidosperma quebracho-blanco,* precipitation, Argentina 3914
  - Australia 2451
  - biodiversity, nature conservation, Canada 6747
  - biomass production, climate, remote sensing, USA 2691
  - birds
    - dead trees
      - America 1515
      - USA, surveys 4902
  - bogs
    - classification, Russia 533
    - cycling, soil fertility 7976
    - *Pinus sylvestris,* dendrochronology, British Isles 9315
    - *Pinus uncinata,* nature reserves, Germany 9930
  - boreal forests
    - air pollution
      - Russia, damage 8838
      - stand characteristics, Russia 7994
    - *Betula,* thinning, biomass production, Russia 9527
    - *Betula ermanii,* Russia, botanical composition 9926
    - biodiversity, valuation, conferences 2483
    - birds
      - *Certhia familiaris,* ecology, Finland 1522
      - *Picoides,* Canada, feeding behaviour 7520
      - *Tetrao urogallus,* Finland 4061
    - carbon cycle
      - climate, Russia, simulation 328
      - mapping, Russia 1952
      - Russia 6449
    - carbon dioxide enrichment
      - Canada, conservation, management 9942
      - Norway 5229
    - climatic change
      - carbon cycle, research projects, Canada 9943
      - forest ecology, simulation, Finland 1621
      - permafrost, Canada 7871
    - climatology, simulation 4768
    - conifers, dendroclimatology, Arctic Regions 4140
    - evapotranspiration, soil water balance, Canada 7949
    - flora, Russia 5437
    - forest ecology
      - climate, Finland 8140
      - Coleoptera, species diversity, Sweden 1471
      - conferences 6800
    - forest fires
      - fire danger, ground vegetation, Canada 9770
      - global warming, carbon cycle 7275
      - history, Russia 8027
      - remote sensing, radiometry, USA 5202
    - forest health, monitoring, Canada 9866
    - forest management
      - environmental impact, assessment, Canada 9622
      - forest ecology, Canada 4427

- **Vegetation types** *cont.*
  - boreal forests *cont.*
    - forest management *cont.*
      - forest resources 1372
      - landscape, Russia 5195
      - nature conservation, Canada, simulation 9621
      - site factors, conferences 4174
      - sustainability
        - international cooperation
          - Canada 9941
          - Europe 9941
          - Russia 9941
          - Scandinavia 9941
      - wildlife, nature conservation, Canada 3500
    - forestry practices, soil compaction, tillage, Canada 1089
    - geographical distribution, climate, Canada 4771
    - ground vegetation, Canada, *Lepus americanus* 9227
    - hares, *Lepus americanus,* Canada, herbicides 4060
    - land classification, soil, mapping, Russia 5210
    - land use, climatic change, Canada, socioeconomics 8540
    - mosses, Estonia 3944
    - natural regeneration, Russia, simulation, management 9965
    - nature conservation, biodiversity, forest management, Scandinavia 3278
    - nitrogen cycle, plant succession, USA 6318
    - nitrogen fertilizers, ground vegetation, humus, Finland 5456
    - Norway 3925
    - old-growth forests, landscape ecology, forest fires, frequency 10137
    - palaeoclimatology, palaeoecology 507
    - peatlands, phytogeography, Latvia 8155
    - photosynthesis, respiration, Canada 8924
    - *Picea*
      - plant succession, forest fires, Canada 9949
      - thinning, biomass production, Russia 9527
    - *Picea abies*
      - forest management, forest ecology, Sweden 10029
      - palaeoecology, stand characteristics, Sweden 7259
    - *Picea glauca,* artificial regeneration, seedlings, Canada 9503
    - *Picea mariana*
      - natural regeneration, Canada, simulation 799
      - oil spills, USA, recovery 1980
    - *Pinus sylvestris,* soil properties, mineralogy, Finland 9685
    - plant succession
      - Canada 4788
      - fires, Canada 4789
      - Russia, simulation 7322
      - USA 9017
    - remote sensing
      - Finland 7007
      - insect pests, spatial distribution, Finland 7839
      - satellites, forest inventories, Sweden 7006
      - thematic mapper, Sweden 6229
    - respiration
      - foliage
        - nitrogen
          - North America 8102
          - simulation 8102
    - riparian forests, birds, Canada, species diversity 10072
    - silvicultural systems, selection system, Japan 1735
    - soil chemistry, Canada 1906
    - soil morphology, Russia 7906
    - soil types, permafrost, thawing, USA 7880

- **Vegetation types** *cont.*
  - boreal forests *cont.*
    - stand characteristics, biomass production, Canada, simulation 9596
    - stand development, statistical analysis, Russia 1407
    - thinning
      - Finland, conferences 6810
      - Russia, conferences 6810
    - water pollution, methylmercury, Canada 3678
    - wildlife
      - *Alces alces,* browse, USA 3214
      - small mammals, air pollution, Russia 8370
    - woody plants, fruits, Canada, plant composition 8673
  - botanical composition, soil properties, soil parent materials, Australia 7043
  - bottomland forests
    - biogeochemistry, logging, USA 7270
    - botanical composition, USA, simulation 1376
    - dead trees, USA, birds, feeding behaviour 6680
    - fishes, Brazil 9233
    - forest decline, flooding, Greece 9236
    - forest management
      - Austria 9936
      - decision making, simulation, USA 5213
      - non-wood forest products, Brazil 5188
    - forest trees, floods, canopy gaps, New Zealand 3964
    - hydrology
      - forest management, Slovakia 5832
      - geomorphology, plant succession, Hungary 8994
    - natural regeneration
      - USA 551
      - wild pigs, agroforestry, Croatia 3268
    - nature reserves, France, reclamation 3281
    - *Populus nigra,* natural regeneration, seed germination, Netherlands 9963
    - *Prestoea montana,* wind damage, Puerto Rico 1066
    - *Quercus robur,* forest decline, Croatia, environmental factors 4726
    - reclamation, water management, UK 10081
    - remote sensing, USA, forest trees, identification 9643
    - *Salix,* natural regeneration, seed germination, Netherlands 9963
    - seed dispersal, Brazil 3035
    - stand characteristics, irrigation, projects, Kenya 6574
    - wildlife, forest management, USA 7513
  - broadleaved evergreen forests
    - birds, *Psittacula krameri,* nature reserves, India 696
    - botanical composition, spatial distribution, species diversity, Thailand 8996
    - ecotones, carbon cycle, soil organic matter, India 1361
    - exotics, invasion, nature conservation, Tanzania 1573
    - forest fires, wind, South Africa 2134
    - forest inventories, remote sensing, Chile 2751
    - forest litter, decomposition, China 1914
    - increment, crown, stem form, South Africa 224
    - mountain forests, synecology, Sri Lanka 1374
    - natural regeneration, protection, forest plantations, India 4811
    - phytogeography, USA 3923
    - plant competition, increment, synecology, South Africa 223
    - precipitation, canopy, China 2400
    - *Quercus coccifera,* forest fires, Greece, fire ecology 9000
    - roots, biomass, dynamics, India 3712

Vegetation types *cont.*
  broadleaved evergreen forests *cont.*
    secondary forests, synecology, stand characteristics, South Africa 516
    soil biology, respiration, India 6294
    stand structure, natural regeneration, canopy gaps, Japan 8178
  broadleaves, remote sensing, image processing, Australia 2763
  brushwood, understorey, synecology, India 522
  caatinga
    Brazil, botanical composition 3900
    controlled burning, biogeochemistry, Brazil, nutrients 2922
    natural regeneration, burning, Brazil 1559
    synecology, Colombia 3921
  cerrado
    Caryocar brasiliense, edible species, Brazil, reviews 8038
    flora, utilization, land use, Brazil 2147
    forest fires, biomass, nutrients, Brazil 527
    synecology, phenology, Brazil 8995
  chaparral
    forest fires, fire danger, remote sensing, USA 2913
    woody plants, nutrition physiology, nutrient allocation, USA 2853
  classification
    Australia 3924
    geographical distribution, Africa, theory 6542
    remote sensing, statistical analysis 1035
  climatic change, simulation, Switzerland 7267
  cloud forests
    acid deposition, fog, Venezuela 3650
    books 4148
    broadleaves, precipitation, deposition, Puerto Rico 2789
    Canary Islands, water resources, ecosystems 7295
    clear felling, plant succession, Venezuela 5458
    fog, Venezuela 3544
    forest ecology, epiphytes, Costa Rica 3091
    Ocotea tonduzii, epiphytes, Costa Rica 1389
    soil organic matter, soil physical properties, Costa Rica 6276
    stand structure, Colombia 1408
    synecology
      altitude, land use, Nepal 1371
      stand structure, layer structure, Mexico 7278
  coastal plant communities
    air pollution, nitrogen, nitrogen cycle, USA 5304
    dunes, New Zealand 1386
    forest trees, forest decline, France 3808
    Pinus halepensis, salt spray, France, damage 6353
    Spain 9007
    synecology, biodiversity, Tanzania 1369
    water uptake, USA, isotope fractionation 2836
  coniferous forests
    Abies balsamea, soil, acidification, USA 1170
    acid deposition
      canopy, leaching, USA 8374
      Japan, chemistry, pH 5337
      soil chemistry, Sweden 344
    aesthetic value, Canada 4377
    air pollution
      forest ecology, Germany 6340
      heavy metals, indicator plants, Finland 3672
      indicator plants, Sweden 8002
      mercury, deposition, Sweden 8851
      ozone
        climate, USA 7102
        USA, geographical variation 8835

Vegetation types *cont.*
  coniferous forests *cont.*
    air pollution *cont.*
      simulation, Russia 7091
      soil pH, Finland 3570
      sulfur dioxide, Canada, simulation 6346
      throughfall, soil chemistry, Europe 5321
    biomass, remote sensing, simulation, USA 1042
    biomass production, climate, USA 1339
    birds
      Canada, surveys 9201
      Dryocopus martius, ecology, Sweden 1521
      forest ecology, Finland 4918
      plant succession, Canada 4927
    botanical composition
      forest fires, USA 3933
      latitude, altitude, USA 4770
    clear felling, landscape, USA 4132
    climatic change
      China, simulation 3555
      simulation, USA 3542
    cycling, soil, laboratory tests 327
    deforestation, hydrology, Czech Republic 5831
    degraded forests, exotics, invasion, USA 3870
    effects, climate, simulation 7678
    evaporation, simulation 8511
    evapotranspiration, Canada 1926
    foliage, plant nutrition, USA 1346
    forest decline
      air pollution, Norway, assessment 7207
      Norway, regions, variation 9859
      synecology, USA, stress factors 2121
      USA 7201
    forest ecology
      altitude, Guatemala 5448
      USA, books 6785
    forest health, Norway, regions, variation 9859
    forest litter, decomposition, soil organic matter, simulation 6285
    forest management
      biodiversity, conservation, USA 8438
      nature conservation, public opinion, Norway 9406
    geographical information systems, Japan, geographical distribution 9931
    ground vegetation
      biomass, Slovakia 9011
      Slovakia 7303
    land use, synecology, USA, history 2408
    leaf area index, remote sensing, USA 1342
    light, shade, photosynthesis, simulation 9662
    logging, water quality, streams, UK 8020
    mercury, deposition, watersheds, Sweden 8853
    multispectral imagery, Japan, reflectance, estimation 9633
    natural regeneration
      microclimate
        Sweden
          equipment 9333
          monitoring 9333
    nitrogen cycle, carbon cycle, Europe, simulation 9364
    nitrogen fertilizers
      streams
        Sweden
          aquatic animals 9458
          water quality 9458
    Picea abies, Slovakia 3932
    Picea mariana, light penetration, Canada 1060
    Picea rubens
      forest litter, decomposition, USA 299
      soil, acidification, USA 1170

Vegetation types *cont.*
  coniferous forests *cont.*
    Pinus, plant succession, soil structure, Russia 285
    Pinus sylvestris
      clear felling, synecology, Estonia 1363
      climatic change, UK 2794
      synecology, Germany 7282
    plant composition, remote sensing, USA 1045, 1344
    plant nutrition, nitrogen, climate, North America 1130
    remote sensing
      Canada, statistical analysis 2753
      mortality, USA 4445-4446
      simulation, USA 1853
      stand characteristics, simulation, USA 1039
      synecology
        simulation, USA 1338
        USA, soil properties 1382
    site preparation, burning, soil properties, USA 9507
    soil biology
      Coleoptera, China 8800
      respiration, India 6294
      soil organic matter, Finland 7939
    soil chemistry, sulfur, losses, Canada 7891
    soil fauna, composition, Canada 3591
    soil organic matter, Germany, forest influences 289
    squirrels, *Sciurus vulgaris,* ecology, Sweden 2390
    stand age, soil chemistry, USA 8774
    stand characteristics, remote sensing, USA 1345
    synecology
      climate, simulation, USA 1340
      layer structure, statistical analysis, Norway 3941
      remote sensing, simulation, USA 1347
    throughfall, chemistry, Canada 1991
    watersheds, hydrology, simulation, USA 4084
    weed control, agroforestry, sheep, USA 7583
    wildlife
      salamanders, stand age, Canada 9221
      Sus scrofa, Spain, habitats 7516
  cycling, soil organic matter, soil fertility, sustainability 5269
  databases, information services, Russia 6836
  deciduous forests
    Acer saccharum, fertilizers, cycling, Canada 886
    acid deposition
      canopy, leaching, USA 8374
      increment, USA, site factors 2693
      Japan, chemistry, pH 5337
      mortality, USA, site factors 2693
    air pollution
      canopy, Canada, deposition 1168
      deposition, USA 7101
    Argentina 3929
    Betula, pollen analysis, atmosphere, Norway 475
    biomass, carbon cycle, North America 3481
    birds
      forest ecology
        Finland 4918
        fragmentation, Canada 4916
    broadleaves, natural regeneration, seed banks, Canada 3119
    canopy
      forest influences, atmosphere, Canada 9763
      structure, aerial photography, Japan 6221
    canopy gaps
      roots, distribution, USA 3109
      soil water, Japan 4485
    carbon cycle
      respiration, clear felling, USA 3592
      UK, radiocarbon dating 4534

Vegetation types *cont.*

- deciduous forests *cont.*
  - *Carpinus betulus*, Romania 3926
  - clear felling
    - natural regeneration, France 3959
    - solar radiation, albedo, Canada 8009
  - cycling
    - potassium, watersheds, USA 319
    - understorey, soil fertility, USA 3619
  - Czech Republic 4776
  - deforestation
    - soil organic matter, carbon cycle, Mexico 4529
    - USA 6721
  - dendrochronology, climate, soil, Canada 4142
  - drought, synecology, increment, USA 3593
  - *Fagus*, synecology, canopy, increment 3906
  - *Fagus grandifolia*, soil chemistry, sulfur, USA 8775
  - *Fagus sylvatica*, soil properties, simulation, Spain 8785
  - forest borders, statistical analysis, Canada 5962
  - forest ecology
    - Coleoptera, species diversity, Sweden 1471
    - growth models, USA, stress analysis 4223
  - forest fragmentation, Japan, forest ecology, *Bombus*, population dynamics 9947
  - forest litter
    - Basidiomycotina, cycling, UK 9713
    - decomposition, roots, USA 2824
    - Mexico 293
    - plant succession, USA 1911
  - fragmentation
    - birds
      - *Columba leucocephala*, USA 4059
      - *Sitta europaea*, Belgium 7514
  - fungal diseases
    - *Nectria*
      - Canada 1462
      - USA 1462
  - gas exchange, simulation, USA 3328
  - geographical information systems, Japan, geographical distribution 9931
  - herbicides, glyphosate, residues, USA 5143
  - history, soil properties, USA, botanical composition 9916
  - hurricanes, forest ecology, natural regeneration, Madagascar 6268
  - hydrology, Venezuela 5287
  - insect pests, Mexico, damage, measurement 6648
  - Japan, islands, surveys 9938
  - land use, synecology, USA, history 2408
  - landslides, New Zealand 4940
  - light penetration, stand age, USA 3556
  - multispectral imagery, Japan, reflectance, estimation 9633
  - natural regeneration, canopy gaps, USA 8182
  - nature reserves, Germany 6749
  - nitrogen cycle
    - topography, USA 2847
    - USA 9731
  - phenology, reproductive behaviour, seasonality, Temperate Zones 8126
  - plant colonization, USA, *Lonicera maackii*, regeneration 5454
  - plant nutrition, nitrogen, climate, North America 1130
  - plant succession
    - fields, France 3959
    - Japan, stand structure 6545
    - Poland 1394
    - site factors, USA 3096
    - volcanoes, Japan 9016

Vegetation types *cont.*

- deciduous forests *cont.*
  - *Quercus*
    - forest litter
      - decomposition, UK 7905
      - UK 7904
    - synecology, climate, Spain 3903
  - *Quercus cerris*, stand characteristics, Italy 6546
  - *Quercus crispula*, Japan 7276
  - roots, cycling, USA 2855
  - rotations, forest economics, USA, basal area 4460
  - runoff, acidification, USA 3574
  - secondary forests, stand structure, composition, China 4767
  - silvicultural conversion, planning, remote sensing, Netherlands 150
  - site preparation, herbicides, natural regeneration, USA 4341
  - site types, France, analysis 1362
  - soil chemistry, nutrient deficiencies, USA, methodology 4191
  - soil organic matter, Germany, forest influences 289
  - soil temperature, simulation 1090
  - stand characteristics
    - population dynamics, height, USA 9961
    - thinning, USA 2165
    - USA 2141
  - stand development, mortality, light, USA 7328
  - stand structure
    - Korea Republic, classification 9008
    - spatial distribution
      - plant competition
        - Czech Republic 3108
        - Poland 3108
  - synecology
    - altitude, India 1365
    - geographical distribution, Saudi Arabia 1360
    - remote sensing, India 9638
    - soil properties, climate, Venezuela 1370
  - throughfall, chemistry, Canada 1991
  - UK 7297
  - ultraviolet radiation, canopy, USA 1884
  - wetlands, soil biology, microorganisms, USA 306
  - wildlife
    - Poland, population dynamics 4917
    - stand characteristics, simulation, USA 4226
  - woody plants, forest litter, decomposition, Spain 2821
- degraded forests
  - agroforestry, Mexico 9287
  - *Albizia zygia*, reclamation, natural regeneration, Ghana 8390
  - *Carpinus betulus*, synecology, national parks, Poland 2140
  - deforestation, rehabilitation, Indonesia 8415
  - detection, Uganda, methodology 8414
  - multipurpose trees
    - medicinal plants, Sri Lanka 5851
    - reclamation
      - development, Indonesia 7560
      - India 9249
  - nature reserves, management, Indonesia, simulation 7684
  - *Picea mariana*, natural regeneration, remote sensing, Canada 7838
  - *Quercus leucotrichophora*, plant succession, India 3254
  - *Quercus robur*, synecology, national parks, Poland 2140
  - reclamation
    - development projects, India 9243
    - planning, India 8388
  - rehabilitation, forest management, community forestry, India 4121
  - site types, increment, amelioration of forest sites, Poland 4089
  - species trials, reclamation, plant succession, India 6704

Vegetation types *cont.*

- dehesa grasslands
  - *Quercus*, water balance, Spain 4077
  - *Quercus ilex*, rangelands, botanical composition, Spain 9924
  - *Quercus pyrenaica*
    - ground vegetation, Spain 1384
    - synecology, agroforestry, Spain 8433
  - woodlands, deer farming, Spain 8355
- deserts
  - ethnobotany, indigenous knowledge, Australia 7706
  - remote sensing, reflectance, Ethiopia 1868
- Dipterocarpaceae, understorey, birds, ecology, Indonesia 6681
- dunes
  - Algeria 3927
  - forest plantations, plant colonization, Japan, *Quercus serrata* 2096
  - insect pests, *Altica bimarginata*, *Salix cordata*, plant succession 5742
  - *Kunzea ericoides*, stand structure, population dynamics, New Zealand 4782
  - synecology, Portugal 7288
- ecosystems, methodology 6552
- fens
  - groundwater, soil chemistry, botanical composition, Germany 8163
  - synecology
    - foliage
      - morphology
        - New Zealand 3898
        - UK 3898
- flora
  - Germany 9003
  - Turkmenistan, books 5919
- foliage
  - characteristics, statistical analysis 3718
  - Singapore, pest resistance 6454
- forest fires, history, USA, mountain areas 7131
- forest litter, decomposition, broadleaves, Canada 4493
- forest resources, Armenia 9394
- forest trees
  - biomass production, stand characteristics, India 6540
  - cycling, India 6541
  - forest ecology, stand structure, China 3073
- forestry, forest ecology, Asia, books, conferences 5922
- forestry development, forest management, Arid Regions, Africa 1011
- forests
  - acid soils, soil analysis, cations, rhizosphere 5236
  - air pollution
    - Europe, assessment 1163
    - forest economics, Poland 1959
    - Poland, forecasting 1956
  - arboreta, Arid Regions, Sri Lanka, monographs 7611
  - biodiversity
    - monitoring, conferences, books 8473
    - nature conservation
      - afforestation, India 4969
      - forest plantations, India 4970
  - canopy, precipitation, simulation 7679
  - carbon cycle, India 2788
  - classification, synecology, Canada, disturbed land 1357
  - climatic change
    - Canada, simulation 7870
    - Spain 9668
    - Temperate Zones, forecasting 3541
  - conservation
    - deforestation
      - India 4106
      - Tropics 4106
  - cycling, soil chemistry, forest litter, Tropics 3634
  - deforestation, land use, history, Pakistan 5859

- **Vegetation types** *cont.*
  - forests *cont.*
    - Dipterocarpaceae, selective felling, fruiting, Peninsular Malaysia 8127
    - dynamics, biodiversity, monitoring, databases 7685
    - ecotypes, regionalization, forest management, planning, Poland 7285
    - energy balance, evapotranspiration, China 8161
    - *Eucalyptus tereticornis,* soil chemistry, India, statistical analysis 1901
    - evapotranspiration, Canada, simulation 7948
    - *Fagus sylvatica,* synecology, Spain, statistical analysis 2142
    - fallout, caesium, soil pollution, Spain 5307
    - foliage, morphology, chemistry, South Africa 8897
    - forest plantations, multiple land use, species diversity, Spain 8407
    - Germany 9939
    - grazing
      - fodder, production, India 682
      - France 5884
    - India 7290
    - insects, Netherlands, ecology 1519
    - land use, environmental degradation, nature conservation, Sri Lanka 1578
    - mapping, geographical information systems, Switzerland 2756
    - mistletoes
      - *Dendrophthoe falcata,* India, surveys 2295
      - Loranthaceae, seed dispersal, Colombia 1469
    - mosses, pollen analysis, dispersal, USA 3040
    - mycorrhizas
      - *Rozites*
        - Myrtaceae, Australia 5592
        - *Nothofagus,* Australia 5592
    - national parks, synecology, maps, Poland 2139
    - natural regeneration, woody weeds, *Lonicera tatarica,* USA 5473
    - nature conservation
      - development projects, Kenya 5896
      - forestry development, Sri Lanka 1579
      - monitoring, experimental plots, Switzerland 10122
    - pesticides, aerial application, Canada, simulation 9365
    - *Pinus mugo,* synecology, Slovakia 521
    - *Pinus roxburghii,* deforestation, synecology, ground vegetation 535
    - plant succession, Poland 1396
    - *Quercus,* synecology, Poland 1380
    - *Quercus faginea,* synecology, Spain 8158
    - *Quercus leucotrichophora,* deforestation, synecology, ground vegetation 535
    - reclamation, South Africa, monkeys, seed dispersal 3211
    - remote sensing
      - radar, backscatter, simulation 7677
      - reflectance, Ethiopia 1868
    - rural economy, India 9554
    - sample plot technique, nature conservation, India 4972
    - *Shorea robusta,* soil chemistry, India, statistical analysis 1901
    - soil
      - nitrogen cycle
        - air pollution, reviews 1953
        - global warming, reviews 1953
    - soil chemistry
      - heavy metals, Germany 288
      - nitrates
        - indicator plants
          - methodology 24
          - seasonal variation 24

- **Vegetation types** *cont.*
  - forests *cont.*
    - soil types, mollisols, ultisols, India 7052
    - soil water, aspect, China 8770
    - species diversity
      - national parks, Indonesia 2143
      - sampling, USA 9349
    - synecology
      - climate, Sri Lanka 1373
      - conferences 5001
      - geology, India 1354
      - South Africa 5451
      - species diversity, soil pH, Poland 7284
      - stand structure, natural regeneration, India 2167
    - *Tectona grandis,* soil chemistry, India, statistical analysis 1901
    - understorey, geographical distribution, palaeoecology, Japan 1349
    - utilization, history, grazing, Switzerland 6842
    - valuation, Mexico 9649
    - watersheds, nitrogen cycle 1951
    - weed control, conferences 1608
    - wetlands, nitrogen cycle, USA 1949
    - wildlife
      - *Alces alces,* broadleaves, browse, Poland 7534-7535
      - Netherlands, ecology 1519
    - woodlands, nomenclature, terminology, Africa 3907
  - fruits, production, Puerto Rico 1309
  - fynbos
    - biodiversity, genetic resources, South Africa 530-531
    - controlled burning, watershed management, South Africa, mountain areas 1193
    - nature conservation, South Africa, biodiversity 528
    - Proteaceae, reproductive behaviour, South Africa 1305
    - resource management, controlled burning, South Africa, biodiversity 529
    - woody plants, choice of species, South Africa, expert systems 9359
    - woody weeds, invasion, South Africa, expert systems 9359
  - garrigue, *Quercus coccinea,* forest fires, simulation, France 2921
  - geographical distribution, climate, Russia, simulation 3938
  - grasslands
    - *Acacia,* weed control, controlled burning, Uganda 5362
    - *Nothofagus,* geographical distribution, palaeoecology, New Zealand 4765
  - heathlands
    - biodiversity, Spain 7298
    - *Eucalyptus,* soil chemistry, Australia, soil fertility 7272
    - *Kunzea ericoides,* stand structure, population dynamics, New Zealand 4782
    - nature conservation, Europe 3931
    - *Pinus sylvestris,* agroforestry, tourism, France 5879
    - plant competition, forest fires, simulation, Australia 3698
    - UK 7297
  - history
    - forest trees, UK 510
    - pollen analysis, Sweden 509
  - hydrology, stream flow, climate, Philippines 5838
  - kerangas, *Dischidia major, Philidris,* Malaysia, mutualism 9134
  - land use, mapping, UK, change 8735
  - mallee, fire danger, Australia 373
  - mangrove forests
    - America 6548
    - *Avicennia marina,* algae, epiphytes, South Africa 7301
    - biodiversity, nature conservation, India 4971

- **Vegetation types** *cont.*
  - mangrove forests *cont.*
    - biomass production, forest litter, latitude, Tropics 3899
    - broadleaves, species trials, Bangladesh 6017
    - *Bruguiera gymnorrhiza,* forest litter, measurement, India 297
    - *Ceriops tagal,* seedlings, survival, environmental factors 5128
    - climatic change
      - peat, formation, Caribbean 6270
      - USA, environmental assessment 6264
    - deforestation, USA 6721
    - degradation, utilization, East Africa 7299
    - drought
      - Gambia, effects 8760
      - Senegal, effects 8760
    - estuaries, *Rhizophora apiculata,* planting, India 6113
    - flora, New Caledonia, surveys 8983
    - forest ecology, Pacific Ocean 3911
    - forest influences, soil properties, variation, Nigeria 8022
    - forest recreation, nature conservation, India 3282
    - fungi
      - China 7384
      - Hong Kong 7384
      - Macau 7384
    - increment, diameter, natural regeneration, Bangladesh 6177
    - India, aquatic organisms, metabolism 7291
    - marine fungi, *Halophytophthora,* forest litter, Bahamas 9066
    - nature conservation, Thailand 8997
    - plant succession
      - seral stages
        - soil properties
          - Bangladesh 284
          - India 284
    - projects, private organizations, Tropics 1358
    - reclamation, India 9251
    - remote sensing, synecology, India 6996
    - *Rhizophora mucronata,* seedlings, survival, environmental factors 5128
    - soil biology, crabs, Australia 7058
    - soil pollution, sediment, heavy metals, Australia 8828
    - synecology, India 523
    - utilization, forest management, conservation, Indonesia 7019
    - valuation, Sarawak 3086
    - wind damage, USA 4481
  - mangrove swamps, palaeoecology, USA 6529
  - maquis
    - flora, New Caledonia, surveys 8983
    - *Quercus coccifera,* forest fires, grazing, Greece 683
    - synecology, Spain 3908
    - woody plants, biomass distribution, France 2152
  - marshes, synecology, Croatia 4775
  - matorral
    - soil surveys, Mexico 301
    - surveys, Mexico 241
    - woody plants, forest litter, decomposition, Spain 2821
  - mixed forests
    - acid deposition, estimation, USA 3320
    - air pollution, forest ecology, Slovakia 5329
    - atmosphere
      - isoprenoids
        - emission
          - simulation 8011
          - USA 8011
    - birds
      - *Dendrocopos leucotos,* national parks, Poland 4064
      - USA, population dynamics 4924

- **Vegetation types** *cont.*
  - mixed forests *cont.*
    - botanical composition
      - climate, simulation, Switzerland 3957
      - topography, aspect, Japan 6274
    - carbon cycle, forest influences, atmosphere, USA 5356
    - clear strip felling
      - runoff
        - evapotranspiration, Japan 4931
        - Japan, logging effects 4934
    - composition, mapping, Switzerland, simulation 246
    - dead wood, decomposition, USA 3587
    - forest decline, synecology, USA, stress factors 2121
    - forest fires, forest litter, USA 2923
    - forest health
      - silviculture 5049
        - France 6864
    - forest influences, air pollution, France, monoterpenes 1187
    - forest management, remote sensing, thematic mapper, USA 7005
    - growth models, Tropics, books 1595
    - increment
      - diameter, methodology 9343
      - recruitment, mortality, Poland 2163
    - insect pests, *Epirrita autumnata,* Estonia, pheromones 9153
    - *Picea abies,* synecology, plant succession, Poland 2164
    - *Pinus koraiensis,* plant succession, simulation, China 5457
    - *Pinus pinaster,* forest management, soil fertility, Spain 1190
    - *Pinus sylvestris*
      - natural regeneration, synecology, Poland 8179
      - synecology, plant succession, Poland 2164
    - *Pinus taeda,* roots, USA, distribution 6425
    - plant nutrition, nitrogen, climate, North America 1130
    - plant succession
      - Netherlands, simulation 797
      - site factors, USA 3096
    - pollen analysis, palaeoecology, USA 8992
    - population dynamics, USA 3965
    - quality, *Pinus,* understorey, Poland 1816
    - *Quercus suber,* forest management, soil fertility, Spain 1190
    - remote sensing, USA, biochemistry, plant water relations 8737
    - seed dispersal, fruits, New Zealand 486
    - seed production, seed dispersal, seed predation, New Zealand 487
    - selection forests, pruning, France 5152
    - soil biology, Coleoptera, China 8800
    - soil chemistry
      - logging, controlled burning, USA 9689
      - seasonal variation, Austria 7886
    - stand characteristics
      - botanical composition, Russia 2145
      - synecology, canopy gaps, USA 4806
    - stand structure
      - spatial distribution
        - plant competition
          - Czech Republic 3108
          - Poland 3108
      - USA 7333
    - synecology
      - altitude, India 1365
      - canopy gaps, plant succession, USA 3101
      - topography, India 7269
    - transpiration, estimation, climate, Czech Republic 3324
    - wildlife, *Sus scrofa,* Spain, habitats 7516

- **Vegetation types** *cont.*
  - mountain forests
    - air pollution
      - damage, artificial regeneration, Germany 9500
      - heavy metals, soil chemistry, USA 342
    - artificial regeneration, mixtures, Germany 948
    - birds, ecology, Spain 8371
    - botanical composition, site factors, statistical analysis, Mexico 3895
    - broadleaves, forest decline, Croatia 4722
    - climate, stand characteristics, simulation, Canada 7332
    - community forestry, biodiversity, conservation, Cameroon 9293
    - conifers, forest decline, air pollution, France 3814
    - cycling, India 3633
    - disturbed land, plant succession, synecology, Papua New Guinea 3104
    - erosion, land use, sustainability, India 9254
    - ethnobotany, Uganda 7798
    - forest economics, forest management 7856
    - forest management, sustainability, logging, Sarawak 6988
    - matorral, synecology, desertification, Morocco 3939
    - nature reserves, Sri Lanka 1375
    - *Picea abies*
      - genetic variation, Europe 6583
      - height, growth models, France 4204
      - site factors 3912
    - *Pinus sylvestris,* Spain 2133
    - plant disorders, hydrology, cycling, Sabah 3806
    - plant succession, New Zealand 4786
    - *Polylepis,* Bolivia 9920
    - *Quercus*
      - deforestation, agroforestry, Costa Rica 7575
      - plant succession, species diversity, Costa Rica 5460
    - secondary forests, synecology, Costa Rica 3901
    - silviculture, Switzerland 4318
    - soil types
      - forest management
        - Czech Republic, monographs 45
        - Slovakia, monographs 45
      - Germany 9707
    - synecology
      - altitude, Slovenia 5444
      - Argentina 2148
      - botanical composition
        - Ethiopia 3897
        - stand structure, Ecuador 3071
      - conferences 3307
      - Greece 3902
      - Guatemala 3079
      - Korea Democratic People's Republic 3919
      - Mexico 3079
    - watersheds, streams, morphology, USA 6698
    - weed control, woody weeds, rights of way, USA 7784
    - wind damage, topography, Jamaica 1080
  - nature conservation
    - national parks, Bolivia 5898
    - USA 9298
  - nature reserves, Germany 9304
  - old-growth forests
    - *Aspidosperma quebracho-blanco,* forest borders, Argentina, stand structure 7271
    - biogeochemistry, USA 8825
    - environmental management, economics, USA 9398
    - forest economics, nature conservation, Canada 7015
    - forest inventories, Canada 6543

- **Vegetation types** *cont.*
  - old-growth forests *cont.*
    - landscape, disturbance, plant succession, USA 6568
    - nature conservation, Canada 6746
    - plant succession, USA, botanical composition 9951
    - *Schinopsis quebracho-colorado,* forest borders, Argentina, stand structure 7271
    - seed banks, Panama, methodology 6581
    - silvicultural systems, USA 8605
    - Temperate Zones, biogeochemistry, cycling, Chile 5296
    - wind damage, canopy gaps, USA 6567
  - palynology, USA 3881
  - peatlands
    - classification, Russia 533
    - palaeoecology, USA 8150
    - *Picea mariana,* palaeoecology, Canada 8149
    - plant nutrition, use efficiency, USA, simulation 9722
  - photosynthesis, biodiversity, Russia 7198
  - *Picea glehnii,* Russia 4779
  - *Pinus sylvestris,* wood properties, Poland 4596
  - plant succession, national parks, Korea Republic 9302
  - plant water relations, water availability, Australia 8807
  - prairies, species diversity, sampling, USA 9349
  - *Quercus coccifera,* synecology, Portugal 7289
  - *Quercus ilex,* seed dispersal, birds, plant succession, France 3092
  - *Quercus petraea,* synecology, Croatia, mountain forests 4774
  - *Quercus pubescens,* Germany 9935
  - rain forests
    - aerial photography, deforestation, Zimbabwe 7002
    - age, forest litter, measurement, Peru 6286
    - agroforestry
      - Mexico 9287
      - synecology, cattle, Mexico 6736
    - *Allosyncarpia ternata,* mortality, forest fires, Australia 3113
    - altitude, synecology, USA 3918
    - arthropods, New Caledonia 7419
    - *Atherosperma moschatum*
      - canopy, light, Australia 3536
      - forest litter, streams, Australia 7896
    - bamboos, *Chusquea,* Peru, forest ecology 538
    - biomass
      - altitude, volcanoes, USA 3103
      - deforestation, Brazil 3736
    - birds
      - seasonal migration, Mexico, habitat selection 9212
      - shifting cultivation, Colombia 3222
    - *Bombax malabaricum,* natural regeneration, ecotones, Australia 3935
    - broadleaves
      - Mexico, wood anatomy 1211
      - soil properties, Nigeria 7878
      - wind damage, Puerto Rico 3561
    - Caesalpinioideae, soil pH, Zaire, monkeys 9218
    - canopy
      - methodology 8498
      - precipitation
        - erosion
          - Sabah 8012
          - simulation 8012
        - French Guiana 9765
    - canopy gaps
      - broadleaves, photoinhibition, Papua New Guinea 1287
      - population dynamics, simulation, Panama 5466
      - understorey, Mexico 540
    - *Cibotium glaucum,* plant nutrition, USA, growth 5455

Vegetation types *cont.*
- rain forests *cont.*
  - classification, remote sensing, thematic mapper, Peru 3511
  - clear felling, erosion, Sabah 1748
  - clearing, forest fires, carbon dioxide enrichment, Brazil 9776
  - climate, USA 9669
  - conservation, sustainability, biodiversity, Ecuador 9300
  - *Dacryodes excelsa,* nutrients, Puerto Rico, measurement 7080
  - deforestation
    - Amazonia 532
    - environment, South East Asia 5864
    - remote sensing
      - Argentina 5861
      - Australia 9261
    - soil acidity, India 5865
  - endangered species, gene banks, DNA 2174
  - epiphytes
    - Colombia, spatial distribution 1387
    - Costa Rica 4784
  - ethnobotany, Sarawak 9555
  - *Eucalyptus*
    - palaeoecology, Australia 2132
    - soil chemistry, Australia, soil fertility 7272
  - fishes, species diversity, conservation, South East Asia 10080
  - flora, New Caledonia, surveys 8983
  - forest ecology
    - books 3
    - Brazil 524
    - canopy, Tropics, research 536
    - fauna, Lycaenidae, China 10026
  - forest economics, deforestation, Tropics 8521
  - forest fires, climate, storms, Australia 7256
  - forest fragmentation
    - biodiversity, mammals, Mexico 9205
    - synecology
      - nature conservation, Australia 10129
      - species diversity, China 8984
  - forest influences
    - soil air, Costa Rica, nitric oxide 8873
    - soil chemistry, Australia 5248
    - soil water balance, Brazil 8871
  - forest litter
    - chemistry, decomposition, Nigeria 3578
    - cycling, Brazil 296
    - soil chemistry, hurricanes, Puerto Rico 6292
  - forest management, Africa South of Sahara, bibliographies 6794
  - forest policy
    - deforestation, Western Samoa 6718
    - nature conservation
      - Indonesia 7598
      - simulation, Indonesia 6849
    - non-governmental organizations 5970
  - forest resources, utilization, education, Nicaragua 1644
  - forest trees
    - flora, Australia, books 4996
    - keys, computer techniques, Australia 6769
    - seed size, recruitment, Chile 7258
    - water uptake, Panama 5283
  - Formicidae, forest ecology, Australia 623
  - fruit trees, improvement planting, economics, Indonesia 4109
  - ground vegetation, Mexico 6558
  - history, Australia 4762
  - insect pests
    - Coleoptera, Malaysia, trapping 7481
    - Formicidae, Australia, ecology 662

Vegetation types *cont.*
- rain forests *cont.*
  - land use, sustainability, biodiversity, Brazil 3352
  - *Lantana camara,* woody weeds, Australia 2647
  - layer structure, New Zealand 6560
  - leaf area index, deforestation, Brazil 3736
  - light penetration, canopy gaps, Australia 3554
  - logging, erosion, runoff, Sabah 4087
  - *Lophira alata,* history, pollen analysis, Cameroon 2130
  - Melastomataceae, botanical composition, soil types, Peru 3940
  - monkeys, hunting, nature conservation, Latin America 5815
  - mountain forests, soil formation, USA 8787
  - mountains, stand development, Australia 5470
  - mycorrhizas, broadleaves, nitrogen fixation 6618
  - natural regeneration
    - canopy gaps
      - light intensity, Costa Rica 1409
      - New Zealand, population dynamics 1393
    - hurricanes, Nicaragua 547
    - species diversity, Tropics, reviews 7326
  - nature conservation
    - Amazonia 532
    - Peninsular Malaysia 731
    - planning, traditional society, Pacific Rim 2426
    - projects, biodiversity, Cameroon 7600
  - nature reserves
    - fragmentation, Brazil, plant physiology 3790
    - nature conservation, Guatemala 2425
    - Sri Lanka 5899
  - non-wood forest products, valuation, Ecuador 2782
  - *Nothofagus cunninghamii,* Australia, Bryophyta, lichens 9945
  - *Pentaspadon motleyi,* natural regeneration, canopy, Peninsular Malaysia 8183
  - phenology, French Guiana 6388
  - plant physiology, border effects, methodology 3790
  - plant succession
    - altitude, volcanoes, USA 3103
    - plant physiology, Venezuela 6569
    - USA 7311
  - Podocarpaceae, light, synecology, New Zealand 271
  - pollen, India 3293
  - precipitation, canopy, wind, Australia, simulation 7123
  - primates
    - forest management, nature reserves, Uganda 4057
    - plant succession, Sierra Leone 1527
  - Proteaceae, foliage, morphology, Australia 4651
  - remote sensing
    - image processing
      - Brazil 2767
      - Mexico 2766
      - Peru 2765
  - *Sacoglottis gabonensis,* history, pollen analysis, Cameroon 2130
  - seed banks, Australia 3824
  - seed size, light relations, Singapore 9882
  - seedlings
    - development, allometry, Japan 2943
    - light, canopy, Australia 2798
  - seeds
    - phenology, Mexico 473
    - survival, predation, Australia 4050
  - selection system, simulation, Australia, sustainability 4428

Vegetation types *cont.*
- rain forests *cont.*
  - shelterwood system, light, India 8619
  - *Shorea,* light, Sri Lanka, plant succession 7022
  - small mammals, Brazil, population ecology 9215
  - soil chemistry
    - nitrogen, phosphorus, Venezuela 5357
    - silicon, Tropics 8778
  - soil fauna, Isoptera, Nigeria 8801
  - soil organic matter, Puerto Rico, carbon, isotopes 9693
  - soil properties
    - Ecuador 3078
    - Guyana, classification 7274
    - synecology, Costa Rica 2154
  - species diversity
    - Colombia 5446
    - forest litter, measurement, Sabah 2823
    - soil fertility, Peninsular Malaysia 1379
  - stand characteristics
    - population dynamics, Ecuador 3952
    - stand age, Canada 6544
  - stand structure
    - biodiversity, Australia 2155
    - simulation, Australia, site factors 3896
  - *Sterculia quadrifida,* natural regeneration, ecotones, Australia 3935
  - synecology
    - botanical composition
      - stand structure
        - Australia 3055
        - Ecuador 3071
        - New Zealand 3076
    - China 9911
    - species diversity
      - Australia 7294
      - ecotones, Côte d'Ivoire 9923
  - throughfall, Peru 6251
  - ungulates, plant succession, Sierra Leone 1527
  - urban areas, nature reserves, Singapore 10133
  - wildlife
    - frogs, Malaysia 9222
    - small mammals, Chile, habitats 7524
  - wind damage
    - Guadeloupe 1063
    - Puerto Rico 276
    - Western Samoa 6266
  - women, forest policy, Latin America 7630
  - woody plants, phenology, climate, Chile 2930
- remote sensing
  - Canada, statistical analysis, classification 2752
  - geology, Canada 260
  - image interpretation, Russia 4454
  - multispectral imagery, Australia 6222
  - radar, data processing, USA 1041
  - radiometry 2764
  - reflectance, USA 1854
  - satellites
    - biomass production, simulation 3509
    - drought, USA 7851
  - simulation, UK 7850
  - stand structure, photosynthesis, USA 5199
  - statistical analysis, Australia 1856
  - USA, spectrometers 1044
  - USSR 5209
  - video recordings, Brazil 1860
- reproductive behaviour, life form, Venezuela 1308
- reserved forests, nature conservation, increment, sample plot technique, Zimbabwe 6816
- riparian forests
  - *Abies alba,* Slovakia 519
  - *Alnus glutinosa,* Spain, classification 4772

Vegetation types *cont.*
- riparian forests *cont.*
  - biodiversity
    - France, conservation 4128
    - Germany, conservation 4128
    - stand structure, Belize, palaeoecology 3960
  - biomass, Brazil 9919
  - birds
    - ecology, South Africa 3210
    - nature conservation, USA 4127
    - plant succession, France 5824
    - species diversity, France 9206
    - USA 4073
  - broadleaves, plant nutrition, flooding, France 3640
  - deer, *Odocoileus virginianus,* Canada, habitats 4903
  - ethnobotany, stand characteristics, Kenya 194
  - flooding, plant succession, Peru, geographical distribution 5467
  - forest ecology
    - Belize, disturbance 1417
    - USA, population dynamics 5442
  - forest influences, water quality, environmental degradation, USA 5346
  - forest litter
    - Brazil, sediment 1100
    - decomposition, streams, USA 5253
  - plant colonization, *Tamarix chinensis,* plant water relations, USA 9018
  - plant succession, mountains, India 3949
  - *Populus,* water stress, cavitation, Canada 1118
  - *Populus fremontii,* birds, species diversity, USA 8362
  - *Prosopis velutina,* hydrology, simulation, USA 1531
  - protection forests
    - streams, USA 4076
    - USA, design 4930
  - reclamation, forest economics, USA, simulation 5850
  - riverbanks, erosion, mechanics, UK 4086
  - Salicaceae, natural regeneration, USA, site factors 8393
  - species diversity
    - Latin America, fragmentation 6547
    - stand structure, natural regeneration, Brazil 8177
  - squirrels, *Ratufa macroura,* nature reserves, India 695
  - stand characteristics, Madagascar 3083
  - stand structure, forest litter, Argentina 3081
  - stream training, plant succession, USA 543
  - synecology
    - botanical composition, Brazil 6538
    - Europe 3934
    - man, riverside plantations, Poland 1175
    - USA 3916
  - *Tamarix chinensis,* birds, species diversity, USA 8362
  - *Tilia cordata,* Slovakia 519
  - water pollution, nitrates, nitrogen cycle, USA 2890
  - wildlife
    - birds, reclamation, USA 4921
    - browsing damage, USA 7543
    - *Rhinoceros unicornis,* browsing damage, Nepal 692
  - Yugoslavia, surveys 534
- riparian vegetation
  - forest management, forest economics, USA, simulation 3501
  - natural regeneration, forest influences, streams, USA 2170
- *Salix helvetica,* synecology, Slovakia 520
- salt marshes, marine fungi, *Halophytophthora,* forest litter, USA 9066

Vegetation types *cont.*
- Saudi Arabia 4777
- savanna woodlands
  - *Acacia tortilis,* shelterbelts, Tanzania 4946
  - *Brachystegia spiciformis,* biomass, Zimbabwe, estimation 6960
  - broadleaves, plant competition, Zimbabwe 4802
  - coppice
    - clear felling, Burkina Faso, regeneration 7768
    - increment, Burkina Faso 6095
  - deforestation, land use planning, development projects, Cameroon 4952
  - degraded forests, grazing, Tanzania 3905
  - Dipterocarpaceae, India 1385
  - forest management
    - development projects, Guinea 9604
    - socioeconomics, Southern Africa, research 8527
  - forest trees
    - biomass, equations, Tanzania 6974
    - phenology, plant nutrition, Zambia 6308
    - volume, equations, Tanzania 6974
  - *Julbernardia globiflora,* biomass, Zimbabwe, estimation 6960
  - land use, agroforestry, West Africa, classification 9927
  - *Lantana camara,* woody weeds, Australia 2647
  - mycorrhizas, broadleaves, nitrogen fixation 6618
  - natural regeneration, farmland, surveys, Tanzania 3114
  - plant succession, drought, simulation, Africa South of Sahara 4212
  - soil organic matter, Zimbabwe, forest litter, soil fertility 2812
  - species trials, water harvesting, rehabilitation, Kenya 6120
  - stand structure, disturbance, soil properties, Zimbabwe 8156
- savannas
  - *Acacia,* seed predation, South Africa, rodents 4068
  - *Acacia caven,* agroforestry, Chile 5878
  - broadleaves
    - ecotones, soil chemistry, Australia 3087
    - forest influences, soil fertility, Zimbabwe 6369
  - *Colophospermum mopane,* geographical distribution, site factors, Africa 6535
  - deforestation, South America 5000
  - ecotones, carbon cycle, soil organic matter, India 1361
  - *Eucalyptus,* Formicidae, controlled burning, Australia 378
  - evaporation, simulation 8511
  - flora, New Caledonia, surveys 8983
  - forest borders, Tropics, books 4165
  - forest fires
    - climate, storms, Australia 7256
    - cycling, Australia 2003
  - forest management, silvicultural systems, climate, Africa 8600
  - forest trees, population dynamics, Côte d'Ivoire, simulation 2511
  - *Guiera senegalensis,* light, Niger, simulation 3546
  - land use, agroforestry, West Africa, classification 9927
  - *Pinus caribaea,* biomass production, nutrient uptake, Nigeria 2704
  - remote sensing, biomass, Mali 3922
  - soil, topography, Mali 3922
  - soil fauna, Isoptera, Nigeria 8801
  - spacing, trees, Venezuela 517
  - stand structure, South Africa, damage 4804
  - synecology
    - land use, Zimbabwe 6549
    - South Africa, books 4997

Vegetation types *cont.*
- savannas *cont.*
  - synecology *cont.*
    - species diversity, ecotones, Côte d'Ivoire 9923
    - trees, population dynamics 3904
- sclerophyllous forests
  - birds, cavities in trees, Australia 6692
  - controlled burning, soil fauna, Australia 6376
  - *Eucalyptus*
    - fauna, Formicidae, Australia 10028
    - *Pinus radiata,* invasion, Australia 1414
    - soil chemistry, Australia, soil fertility 7272
  - *Eucalyptus marginata,* seed germination, light, Australia 8180
  - flora, New Caledonia, surveys 8983
  - forest fires, weeds, invasion, Australia 8886
  - forest litter, decomposition, Australia 7051
  - insect pests, Formicidae, Australia, ecology 662
  - natural regeneration, Australia, fungal diseases, *Phytophthora cinnamomi* 3954
  - phytogeography, USA 3923
  - reproductive behaviour, habit, Chile 3839
- sclerophyllous scrub
  - Argentina 3929
  - botanical composition
    - forest fires, Australia 7138
    - site factors
      - Australia 3077
      - South Africa 3077
  - climatic change, Mauritania, degradation 7296
  - deer, *Cervus elaphus,* browsing damage, Corsica 7525
  - forest fires
    - forest ecology, invertebrates, Australia 8324
    - soil temperature, seed germination, Australia 8036
  - nature conservation, Australia 7283
  - plant water relations, Portugal, leaf water potential, seasonal variation 4514
  - shrubs, habit, Spain 3705
  - synecology, conferences 3307
- scrub
  - Algeria 3927
  - birds
    - ecology, Spain 8371
    - *Vireo atricapillus,* USA, habitats 4925
  - *Cistus ladanifer,* synecology, species diversity, Spain 9922
  - fuelwood, Morocco, environmental degradation 7111
  - *Lantana camara,* biomass production, cycling, India 3254
  - national parks, land use, remote sensing, Spain 6751
  - *Prosopis flexuosa,* Argentina, research, ecology, management 1383
  - Spain 3928
  - synecology
    - altitude, India 1365
    - geology, India 1354
  - wildlife, *Sus scrofa,* Spain, habitats 7516
- seasonal behaviour, remote sensing, radar, USA 1029
- secondary forests
  - *Arundinaria falcata,* biomass production, cycling, India 3254
  - birds, plant succession, Costa Rica 4923
  - broadleaves, seedlings, morphology, identification, Peru 6431
  - *Cavanillesia platanifolia,* phenology, forest litter, Colombia 1205
  - conifers, plant succession, Japan, age structure 4325

- **Vegetation types** *cont.*
  - secondary forests *cont.*
    - deforestation, biodiversity, nature conservation, China 9006
    - *Eucalyptus sieberi,* controlled burning, simulation, Australia 2497
    - forest management, growth models, research, Australia 6833
    - France, mountain areas 9928
    - *Jacaranda copaia,* natural regeneration, stand structure, Peru 6578
    - land use
      - carbon balance, Brazil, estimation 9734
      - carbon cycle, Brazil, estimation 9735
    - natural regeneration, nature conservation, New Zealand 3869
    - seed size, light relations, Singapore 9882
    - selective felling, planning, sustainability, Venezuela 5122
    - *Shorea,* improvement planting, Indonesia, methodology 7770
    - soil chemistry, nutrients, Brunei Darussalam 7055
    - soil properties, synecology, Costa Rica 2154
    - stand structure, biomass, Brunei Darussalam, estimation 6939
    - synecology
      - altitude, India 1365
      - botanical composition, stand structure, Ecuador 3072
    - understorey, Brunei Darussalam, surveys, classification 7307
    - USA, environmental factors 2151
  - silviculture, USA, books 3301
  - site types, Germany 4769
  - small mammals, USA 9224
  - soil fertility, foliage, morphology, plant nutrition, Peninsular Malaysia 6551
  - soil organic matter, soil types, India 7925
  - soil properties, USA, classification 3057
  - soil types, altitude, Japan, mountain forests 9925
  - steppes
    - carbon cycle, climate, Russia, simulation 328
    - land classification, soil, mapping, Russia 5210
    - Romania 3920
  - subalpine forests
    - *Abies lasiocarpa*
      - USA
        - disturbed land
          - human activity 9940
          - recovery 9940
    - canopy gaps, natural regeneration, Japan 6523
    - conifers, dendroclimatology, USA 4470
    - dendrochronology, USA 3291
    - fire behaviour, Canada, simulation, prediction 6375
    - flowering, phenology, insects, Japan 1304
    - forest fires, avalanches, Canada 1997
    - forest management
      - planning, Sweden, simulation 9605
      - site factors, conferences 4174
    - phytogeography, Guatemala, Costa Rica 6537
    - *Picea*
      - USA
        - disturbed land
          - human activity 9940
          - recovery 9940
    - *Picea abies*
      - genetics, isoenzymes, natural layering, Germany 558
      - natural regeneration, mosses, Switzerland 6555
      - site factors 3912
    - *Populus tremuloides*
      - USA
        - disturbed land
          - human activity 9940
          - recovery 9940

- **Vegetation types** *cont.*
  - subalpine forests *cont.*
    - respiration
      - foliage
        - nitrogen
          - North America 8102
          - simulation 8102
  - surveys
    - forest trees, USA, history 3892
    - geographical information systems, Australia, sampling 7014
  - swamps
    - *Alnus glutinosa,* peatlands, synecology, Latvia 1381
    - fishes, species diversity, conservation, South East Asia 10080
    - forest influences
      - air, USA, emission 362
      - hydrology, USA, emission 362
    - natural regeneration, seedbeds, pneumatophores, Sarawak 7331
    - *Shorea,* silvicultural systems, Peninsular Malaysia 8606
    - soil fauna, Isoptera, Nigeria 8801
    - *Taxodium distichum,* forest litter, decomposition, USA 3579
    - understorey, birds, ecology, Indonesia 6681
  - Sweden, botanical composition, assessment 6539
  - synecology
    - altitude, USA 6526
    - Australia 3074
    - classification, North America 3082
    - Croatia 4778
    - degraded forests, Bolivia 9932
    - forest fires, altitude, USA 3053
    - soil properties, deserts, Saudi Arabia 8162
    - South Africa 8160
  - thicket, *Myrica cerifera,* transpiration, USA, simulation 8815
  - tropical forests (*see also* Tropical forests)
    - bacteria, soil bacteria, Fabaceae, Brazil 9071
    - biodiversity, Africa, arthropods, soil fauna 5037
    - biomass, Brazil, uncertainty 9594
    - canopy, light, leaf area index, Mexico 8756
    - conservation, research, Ecuador 9301
    - *Dacryodes excelsa,* Puerto Rico, basal area, growth 7825
    - deforestation
      - biodiversity, nature conservation, China 9006
      - history, Brazil, books 6779
    - Dipterocarpaceae, biomass, Peninsular Malaysia, estimation 8706
    - evapotranspiration, transpiration, Brazil, estimation 8378
    - forest management
      - development projects
        - Guinea 9604
        - Honduras 9607
      - history, India, ecology 5031
      - planning
        - Francophone Africa 8519
        - West Africa 8520
      - sustainability
        - Central African Republic 8720
        - forest policy, Indonesia 9391
        - indigenous knowledge
          - India 2724
          - Latin America 7690
      - tenure systems, community forestry, Latin America 3494
    - forest policy, forest management, deforestation, development projects 8514, 9370
    - fungal diseases, *Daedaleopsis flavida,* broadleaves, India 6627
    - growth models, reviews 5017
    - height, measurement 3313
    - insect pests
      - *Eucalyptus*
        - Australia 3175
          - damage 3174
    - land use
      - carbon balance, Brazil, estimation 9734

- **Vegetation types** *cont.*
  - tropical forests *cont.*
    - land use *cont.*
      - carbon cycle, Brazil, estimation 9735
    - logging
      - canopy gaps, French Guiana, mortality 9533
      - deforestation, forest management, sustainability 9609
    - mammals
      - nature reserves
        - India
          - models 10076
          - sampling 10076
    - medicinal plants, valuation, nature conservation 9569
    - national parks, biodiversity, nature conservation, India 5897
    - natural regeneration
      - forest fires, Brazil 377
      - forest management, forest plantations, Bangladesh 6105
      - recruitment, mortality, Panama 3120
    - nature conservation
      - books 7626
      - Costa Rica 1581
    - palaeoecology, forest litter, analysis, Peru 3887
    - phenology, foliage, seasonality, climatic change 8043
    - pollination, Apidae, conservation, Brazil 6643
    - primates, Peninsular Malaysia, logging effects 9203
    - remote sensing
      - canopy, Ghana 9642
      - land use, area, estimation 9634
    - reserved forests, Zimbabwe, bibliographies 7635
    - seed banks, natural regeneration, Colombia 1314
    - silviculture, natural regeneration, forest ecology 9009
    - soil chemistry, India 6279
    - soil properties, Sri Lanka 5348
    - synecology, ground vegetation, biomass production, India 9933
    - treelines, Ethiopia, reviews 3917
    - wildlife
      - logging, nature conservation 9296
      - seed dispersal, Uganda 8953
  - tundra
    - effects, climate, simulation 7678
    - increment, height, USA, spatial variation 7822
  - turtles, *Rhinoclemmys,* seed dispersal, Costa Rica 6515
  - USA 7281
  - vertebrates, forest fires, Canada 9220
  - virgin forests
    - agroforestry, birds, species diversity, Indonesia 7577
    - forest management, nature conservation, public opinion, Norway 9406
    - lichens, carotenoids, indicator plants, Poland 7300
  - wetlands
    - *Acer rubrum,* USA, *Clethra alnifolia,* regeneration 5453
    - biomass production, soil water regimes, USA 6963
    - broadleaves, stand development, Croatia, simulation 4807
    - *Chamaecyparis thyoides*
      - microrelief, disturbed land, USA 7875
      - pollen analysis, forest fires, plant succession, USA 3877
    - drainage, soil air, Finland 7783
    - environmental impact, USA 7082
    - *Eucalyptus,* foliage, leachates, Australia 8824
    - forest fires, USA 369
    - forest influences, air, methane, Canada 361
    - forest management
      - hydrology, USA 7546
      - USA 6799

Vegetation types *cont.*
- wetlands *cont.*
  - logging, USA, ecology 8152
  - Paraguay 1378
  - *Pinus uncinata*, nature conservation, France 3915
  - projects, private organizations, Tropics 1358
  - Salicaceae, plant succession, USA 2157
  - silviculture, water quality, USA 7545
  - synecology, site factors, Canada 8159
  - USA, books 1594
- wind damage
  - canopy, Puerto Rico 1074
  - USA 4480
- woodland grasslands
  - *Acacia erubescens*
    - canopy
      - ground vegetation, South Africa 359
      - soil fertility, South Africa 359
  - *Combretum apiculatum*
    - canopy
      - ground vegetation, South Africa 359
      - soil fertility, South Africa 359
  - Poland, botanical composition 9010
- woodlands
  - *Acacia*, synecology, ecotones, Kenya 5443
  - *Acacia aneura*, landscape, soil chemistry, Australia 9002
  - *Acer pseudoplatanus*, soil pollution, heavy metals, UK 8855
  - *Colophospermum mopane*, geographical distribution, site factors, Africa 6535
  - ecology
    - *Baikiaea plurijuga*, Zimbabwe, bibliographies 7634
    - *Brachystegia spiciformis*, Zimbabwe, bibliographies 7634
  - *Eucalyptus*
    - erosion, Australia 9241
    - honey bees, birds, Australia 8356
  - *Eucalyptus salmonophloia*, recruitment, Australia, reproductive behaviour 6573
  - forest management, indigenous knowledge, Zimbabwe, books 7627
  - fragmentation, *Eucalyptus albens*, population genetics, Australia 5559
  - *Juniperus*, erosion, remote sensing, USA 709
  - mycorrhizas
    - *Fagus*, Netherlands 9084
    - *Quercus*, Netherlands 9084
  - national parks, synecology, maps, Poland 1377
  - nature conservation, UK, reviews 10124
  - *Pinus edulis*, erosion, remote sensing, USA 709
  - *Quercus*, birds, nesting, USA 6679
  - synecology
    - land use, Zimbabwe 6549
    - layer structure, forest management, UK 10149
    - South Africa 5451
  - UK, guide books 8449
  - wildlife, nature conservation, UK 3277
- woody plants, species diversity, Temperate Zones 2149

Vegetative propagation
- *Abies fraseri*, Christmas trees 6144
- *Acacia mangium* × *Acacia auriculiformis*, handbooks 2600
- *Acer rubrum*, cultivars, tissue culture, growth, plant physiology 7734
- afforestation, tree breeding, plant physiology, Tropics 554
- air layering
  - *Albizia lucida* 2607
  - *Carissa carandas*, India 114
  - *Pinus caribaea*, Venezuela 2597
  - *Terminalia arjuna*, India 108

Vegetative propagation *cont.*
- air layering *cont.*
  - *Terminalia chebula*, India 108
- bamboos, *Bambusa tulda*, India 101
- *Betula pendula*, shoots, habit, UK 410
- Betulaceae 4288
- broadleaves, Malaysia 2602
- budding, *Tectona grandis*, seed orchards, tree breeding, Peninsular Malaysia 7742
- cuttings, *Lagerstroemia parviflora*, India 1718
- Dipterocarpaceae, greenhouses, techniques 9452
- *Eucalyptus*
  - breeding programmes, pulpwood production, South Africa 552
  - genetic variation, molecular genetics 8248
  - Indonesia 6064
- forest trees
  - India
    - research 93
    - reviews 93, 97
  - tree breeding, economics, reviews 94
- grafting
  - *Agathis dammara*, tree breeding, Indonesia 877
  - *Alnus cordata*, clones, Italy, growth 8579
  - *Betula*, rootstock scion relationships 8575
  - broadleaves, Colombia 879
  - *Cedrus atlantica*, provenance, Italy 9449
  - compatibility, disease resistance, *Pseudotsuga menziesii*, plant composition 1455
  - ornamental woody plants, pruning, books, techniques 5917
  - *Picea sitchensis*, dormancy, treatment 2599
  - *Populus*, compatibility 2583
  - *Quercus suber*, Sardinia, techniques 6066
  - rootstocks, *Pseudotsuga menziesii*, Canada 2590
  - *Sequoia sempervirens*, juvenility, plant composition, phosphoproteins 8922
  - *Tectona grandis*, seed orchards, establishment, India 6043
- hypocotyls, *Rhizophora apiculata*, India 2603
- indigenous knowledge, multipurpose trees, Nepal 6883
- *Juglans nigra* × *Juglans regia*, histology, physiology, age 443
- layering, shoot cuttings, *Faidherbia albida*, India 8586
- micropropagation, rooting, *Juglans nigra* × *Juglans regia*, culture media, sucrose 5069
- *Nothofagus*, seed germination, Chile 6086
- *Pinus*, breeding programmes, pulpwood production, South Africa 552
- *Pinus brutia* × *Pinus halepensis*, Greece, methodology 4274
- root cuttings, broadleaves, Bangladesh 6045
- rooting, reviews 3403
- rootstocks, *Betula*, flooding tolerance, plant physiology 2589
- shoot cuttings
  - *Acacia*, plant growth regulators, IBA, roots 7736
  - *Acacia mangium* 3404
  - *Acer*, ornamental woody plants 10150
  - afforestation, Peninsular Malaysia 6046
  - *Azadirachta indica*, India 98
  - bamboos 1801
    - *Bambusa vulgaris* 107
  - *Bambusa vulgaris*, India 871
  - *Bauhinia retusa*, India 113
  - Betulaceae, rooting, lasers 5077
  - broadleaves
    - Colombia 879
    - roots 2582
  - *Calliandra calothyrsus*, coppice 1692

Vegetative propagation *cont.*
- shoot cuttings *cont.*
  - *Casuarina equisetifolia*, India 103, 3400
  - *Casuarina glauca*, India 3400
  - *Cedrela odorata* 2577
  - *Chamaecyparis thyoides* 881
  - conifers, reviews 96
  - *Coriaria nepalensis*, erosion control, India 95
  - *Cryptomeria japonica*, foliage, morphology 9446
  - *Cupressus sempervirens*
    - Italy 4290
      - resistance, fungal diseases 6052
  - cutting date, rooting, *Platanus acerifolia* 4283
  - *Dalbergia sissoo*, India 6060, 9443
  - *Debregeasia hypoleuca*, erosion control, India 95
  - Dipterocarpaceae, rooting 9453
  - *Dryobalanops lanceolata* 91, 6887
  - *Eucalyptus*, techniques 2604
  - *Eucalyptus globulus*
    - genetic variation 5539
    - rooting 3396
  - *Eucalyptus grandis* 3391
    - USA 878
  - *Eucalyptus stellulata*, etiolation 8576
  - *Fagus sylvatica*, plant growth regulators 6884
  - *Faidherbia albida*, increment, plant morphology, Burkina Faso 6061
  - *Ficus*, India 1689
  - *Ficus benjamina*, Indonesia 6051
  - *Gmelina arborea* 6063
  - grafting, *Larix decidua*, tissue culture, shoot tip culture 4280
  - growing media
    - *Azadirachta indica* 864
    - *Bombacopsis quinata*, Colombia 1706
    - *Inga dulcis* 864
  - hydroponics, *Taxus*, medicinal plants, taxol 2679
  - *Larix eurolepis*, techniques 2586
  - *Maackia amurensis*, USA 1707
  - management, *Bombacopsis quinata*, clones, Colombia 1705
  - mangroves, *Avicennia*, India 102
  - micropropagation, *Betula pubescens*, plant morphology, rooting 5067
  - multipurpose trees, India 105
  - *Nothofagus*, Chile 6062
  - ornamental woody plants, landscape, Canada 6041
  - *Peronema canescens*, liquid fertilizers, Indonesia 1687
  - *Picea abies*, increment, habit, Finland 866
  - *Pinus contorta*, tissue culture, auxins, growth rate 3405
  - *Pinus roxburghii*, India 99
  - *Pinus taeda*, auxins, genetic variation, rooting 5068
  - *Pongamia pinnata*, India 872
  - *Populus*
    - roots, development, USA 2031
    - weed control, France, herbicides 8632
  - *Populus ciliata*, India 106
  - *Populus deltoides*, India 106
  - *Populus* 'G-3', species trials, India 63
  - *Prosopis juliflora* 1693
    - Cape Verde 1694
    - Haiti
      - fogging
        - equipment 2596
        - growing media 2596
  - *Pseudotsuga menziesii*, maturation, measurement, plant morphology 4653
  - *Quercus petraea*, branching, selection criteria, plant morphology 5374
  - *Quercus suber*, roots 6891
  - rooting
    - containers, *Salix purpurea*, USA 4272
    - *Prosopis juliflora*, respiration, measurement 880

- **Vegetative propagation** *cont.*
  - shoot cuttings *cont.*
    - rooting *cont.*
      - *Taxodium distichum,* USA 3397
    - rooting capacity, *Larix eurolepis,* genetic variation, France 570
    - *Salix tetrasperma,* India 1689
    - *Shorea albida,* Sarawak 5074
    - *Shorea leprosula* 9456
      - plant growth regulators, Malaysia 6890
    - *Shorea parvifolia,* Indonesia 1686
    - *Spondias purpurea,* seasonal variation 9441
    - *Sterculia urens,* India 104
    - *Syzygium cumini,* India 1690
    - *Tamarix,* shelterbelts, saline soils, Mexico 7556
    - *Tamarix aphylla,* India 3400
    - *Taxus* 868
    - *Tilia,* Italy 5062
    - *Triplochiton scleroxylon,* breeding programmes, Nigeria, techniques 4284
    - *Woodfordia fruticosa,* erosion control, India 95
    - woody plants, plant growth regulators 1258
  - *Tectona grandis,* India, reviews 100
  - tissue culture (*see* Tissue culture)
- **Veneers,** *Populus canadensis,* Spain, quality, variation, growth effects 6365
- **Venezuela**
  - agroforestry, development, rehabilitation, land use, conflict 6727
  - birds
    - dead trees, vegetation types 1515
    - *Stenocereus griseus,* fruits, predation 6514
  - broadleaves
    - foliage, phenology, photosynthesis, plant water relations 4704
    - plant water relations, drought resistance 3594
    - species trials, reclamation, mined land 6711
  - cloud forests
    - acid deposition, fog 3650
    - clear felling, plant succession 5458
    - fog 3544
  - *Clusia*
    - photosynthesis, metabolism 2990
    - plant composition, propolis 1232
  - deciduous forests
    - hydrology 5287
    - synecology, soil properties, climate 1370
  - *Drypetes standleyi,* flora 1326
  - exotics, reclamation, mined land 6711
  - *Ficus,* phenology, developmental stages 9779
  - forest trees
    - phenology, flowering, fruiting 5368
    - wood properties, choice of species, forest management 6025
  - fungal diseases, *Botryodiplodia theobromae, Pinus caribaea,* blue stain 2285
  - insect pests
    - *Atta laevigata, Pinus caribaea,* host parasite relationships 4044
    - *Brassolis sophorae,* Arecaceae 5732
  - *Leucaena,* variety trials, biomass production, nutritive value 5061
  - mangroves, *Rhizophora mangle,* rhizosphere, species diversity 518
  - *Morisonia americana,* foliage, development, chemistry, photosynthesis 1264
  - nature conservation, development projects 9299
  - *Ouratea,* taxonomy 7238
  - *Pinus*
    - forest plantations, insect pests 6645
    - species trials, provenance trials 6024
  - *Pinus caribaea*
    - air layering 2597
    - forest plantations, research 953
  - rain forests
    - plant succession, plant physiology 6569
- **Venezuela** *cont.*
  - rain forests *cont.*
    - soil chemistry, nitrogen, phosphorus 5357
  - reproductive behaviour, life form, vegetation types 1308
  - riparian forests, species diversity, fragmentation 6547
  - savannas, spacing, trees 517
  - secondary forests, selective felling, planning, sustainability 5122
  - *Sterigmapetalum chrysophyllum,* taxonomy 9901
  - *Tectona grandis,* forest plantations, phosphorus fertilizers, increment 4307
  - tropical forests, mortality 3122
  - vessels, plant water relations, plant ecology 4622
  - *Weinmannia ilutepuiensis,* taxonomy 7234
- ***Vepris***
  - taxonomy
    - Africa 3045
    - Persian Gulf States 3045
- ***Verbesina,*** choice of species, forestry development, South America 2551
- **Vertebrates,** vegetation types, forest fires, Canada 9220
- ***Verticillium dahliae***
  - fungal diseases
    - *Cercis,* susceptibility 2265
    - *Fraxinus,* USA 5655
- **Veteran or remarkable trees**
  - amenity and recreation areas, Moldova 6757
  - *Celtis paniculata,* Australia 6857
  - UK 6160
- ***Viburnum farreri,*** shoot cuttings, landscape, Canada 6041
- ***Viburnum opulus,*** insect pests, *Euphydryas maturna, Fraxinus excelsior,* Sweden, parasitoids 5708
- ***Viburnum tinus***
  - mites, mutualism 622
  - species trials, rehabilitation, Canary Islands 6032
- **Video techniques,** wood anatomy 5947
- **Vietnam**
  - agroforestry, periodicals 9316
  - *Bruguiera gymnorrhiza,* wood properties 4641
  - deforestation, land use, sustainability, water resources 707
  - forestry development, development projects, international cooperation 1628
  - *Melaleuca,* genetic resources, afforestation 3990
  - national parks, forest inventories, botanical composition, stand structure 7604
  - reclamation
    - afforestation, agroforestry 6709
    - degraded land
      - afforestation 3244
      - agroforestry 3244
  - *Rhizophora apiculata,* wood properties 4641
  - *Styrax tonkinensis,* silviculture 2662
  - timbers, wood anatomy 4662
- ***Viminaria juncea,*** seed germination, temperature 76
- ***Vinca minor,*** frost resistance, acclimatization, photosynthesis 1886
- **Vines** (*see* Climbers)
- **Viral diseases**
  - amenity trees, UK, books 6
  - bamboo mosaic potexvirus, *Bambusa oldhamii,* Taiwan 5671
  - broadleaves, Germany 8318
  - *Fagus sylvatica,* Germany, transmission 2290
- ***Vireo atricapillus,*** birds, scrub, USA, habitats 4925
- ***Virgilia oroboides,*** genetic variation, South Africa 7378
- **Virgin forests**
  - conifers, remote sensing, USA 1865
  - landscape ecology, forest fragmentation, USA 1587
- **Virgin forests** *cont.*
  - nature conservation
    - Puerto Rico 4966
    - UK 735
  - North America, conferences 1605
  - *Pinus ponderosa,* stand characteristics, USA, nature conservation 3956
  - plant succession, dendrochronology, USA 6562
  - primates, ecology, shifting cultivation, Sierra Leone 3215
  - research, Switzerland 38
  - silviculture, USA, deciduous forests 3432
  - USA, area, estimation 2730
- ***Virola koschnyi,*** afforestation, pastures, Costa Rica, stem form, growth 5051
- ***Virola surinamensis***
  - forest ecology, logging, Brazil, damage 1173
  - seed germination, moisture content, storage 8569
  - seedlings, light, Panama, predation, growth 3100
- ***Viscum orientale,*** mistletoes, *Albizia amara,* India 2295
- **Visibility,** forestry machinery, safety, Japan, measurement 962
- ***Vismia cayennensis,*** seedlings, morphology, identification, secondary forests, Peru 6431
- ***Vismia guianensis,*** plant water relations, canopy gaps, plant succession, Brazil 6576
- ***Visnea mocanera,*** species trials, rehabilitation, Canary Islands 6032
- ***Vitellaria paradoxa***
  - mistletoes, *Tapinanthus,* Burkina Faso 7414-7415
  - taxonomy 9897
- ***Vitex,*** taxonomy, South Africa, new taxa 502
- ***Vitex gaumeri,*** wood anatomy 4629
- ***Vitex glabrata,*** forest litter, decomposition, India 1917
- ***Vitex negundo,*** foliage, essential oils 8079
- ***Vitex obovata,*** taxonomy, South Africa, new taxa 502
- ***Vitex pubescens,*** reclamation, degraded forests, development, Indonesia 7560
- ***Vitex wightiana,*** natural regeneration, protection, forest plantations, India 4811
- ***Vitis rotundifolia***
  - stems
    - mechanics 9797
    - roots, mechanics 9797
- ***Vochysia divergens,*** biomass, plant colonization, Brazil, estimation 7823
- ***Vochysia ferruginea***
  - afforestation, pastures, Costa Rica, stem form, growth 5051
  - natural regeneration, hurricanes, Nicaragua 3438
  - soil chemistry, nitrogen, mineralization, Costa Rica 5247
  - species trials, Costa Rica 4262
- ***Vochysia guatemalensis***
  - afforestation, pastures, Costa Rica, stem form, growth 5051
  - rain forests, Mexico, wood anatomy 1211
  - soil chemistry, nitrogen, mineralization, Costa Rica 5247
  - species trials, Costa Rica 4262
- **Volcanic ash**
  - *Abies amabilis*
    - forest decline, USA 1995
    - forest litter, decomposition, USA 1098
  - *Pseudotsuga menziesii,* forest litter, decomposition, USA 1099
- **Volcanoes**
  - dead trees, soil air, carbon dioxide, USA 8874-8875
  - deciduous forests, plant succession, Japan 9016
  - *Pseudotsuga menziesii,* natural regeneration, dendrochronology, USA 363
  - rain forests
    - biomass, altitude, USA 3103
    - plant succession, altitude, USA 3103
  - tephra, conifers, understorey, USA, damage 539

Voles
- *Clethrionomys californicus*
  - *Pseudotsuga menziesii*
    - truffles, USA 7521
    - USA, habitats 7522
  - USA, forests, fragmentation 7528
- *Clethrionomys glareolus*
  - *Populus*, Germany, trapping 3212
  - *Salix*, Germany, trapping 3212

Volume
- equations
  - *Eucalyptus globulus*, coppice, Chile 3325
  - forest trees, savanna woodlands, Tanzania 6974
- forest trees, increment, bark, Spain, equations 5961
- *Picea abies*, stem form, taper, Denmark, equations 991
- *Pinus radiata*, assortments, yield forecasting, South Africa, equations 216
- *Pinus strobus*, forest inventories, Canada 4383

Volume determination
- broadleaves, taper, estimation, USA 4382
- conifers, forest plantations, equations, nondestructive testing 6161
- equations
  - *Acacia mangium*, forest plantations, volume tables, Bangladesh 6173
  - autocorrelation 3476
  - *Dipterocarpus turbinatus*, forest plantations, volume tables, Bangladesh 6172
  - *Eucalyptus camaldulensis*, irrigated stands, Kenya 5960
  - forest trees 8695
  - *Lithocarpus densiflorus*, USA, geographical variation 6163
  - *Picea abies* 9578
  - *Pinus banksiana*, Canada 1819
  - *Pinus sylvestris*, forest inventories, Finland 7814
  - *Pseudotsuga menziesii*, heartwood 989
  - *Terminalia brownii*, irrigated stands, Kenya 5960
- equipment, computers 9337
- estimation
  - *Abies borisii-regis*, Greece, cost analysis 8696
  - *Fraxinus excelsior*, remote sensing, radar, Netherlands 3518
  - *Populus*, remote sensing, radar, Netherlands 3518
  - sampling 2501
- *Eucalyptus*
  - Australia, equations 4389
  - biomass, estimation, India, equations 8503
  - India, equations 9579
- *Eucalyptus fastigata*, stem form, equations 5169
- *Fagus sylvatica*, forest inventories, remote sensing, Austria 6216
- forest inventories, sampling, stand structure 9625
- forest trees, Canada, stumps, residues 2684
- mathematics 6164
- merchantable volume
  - conifers, stem form, equations 1822
  - equations, *Gmelina arborea*, forest plantations, Nigeria 7669
  - estimation, *Nothofagus pumilio*, Argentina 5171
- *Picea abies*, forest plantations, Slovenia, old fields 2683
- *Pinus*
  - biomass, estimation, India, equations 8503
  - stem form, taper, equations 7815
- *Pinus elliottii*, site class assessment, USA, estimation 2686
- *Pinus nigra*, remote sensing, radar, UK, statistical analysis 3519
- *Pinus palustris*, forest plantations, USA, equations 6165
- *Pinus pinaster*, stem form, taper, Spain 788

Volume determination *cont.*
- *Pinus taeda*
  - height, sampling 9348
  - statistical analysis 8505
- *Quercus chrysolepis*, USA, equations 4390
- *Quercus robur*, remote sensing, Russia 8693
- remote sensing
  - photogrammetry, Germany, statistical analysis 1034
  - thematic mapper, Canada, coniferous forests 5203
- roundwood, broadleaves, Malawi 2689

Volume tables
- *Acacia mangium*, forest plantations, volume determination, equations, Bangladesh 6173
- *Cryptomeria japonica*, diameter 4391
- *Dipterocarpus turbinatus*, forest plantations, volume determination, equations, Bangladesh 6172
- France, history, development 6961
- *Fraxinus excelsior*, Italy 6175
- *Nothofagus procera*, Chile, secondary forests 992
- *Picea abies*, Norway 5170
- *Picea mariana*, Canada 215
- *Pinus* (Southern), USA 6174
- *Pinus sylvestris*, Italy 8694
- regression analysis, Croatia 4414
- *Swietenia macrophylla* × *Swietenia mahagoni*, Puerto Rico, forest plantations 2713

Vombatus ursinus, mammals, forest trees, Australia 10063

Votomita cupuliformis, new species, Panama 9904

Vouacapoua americana, recruitment, seed dispersal, soil water regimes, French Guiana 6571

Wallabia bicolor
- marsupials
  - *Eucalyptus regnans*, tree guards, damage 6691
  - forest trees, browsing damage, seedlings 5823

Wapiti (*see Cervus elaphus*)

Washingtonia filifera, fungal diseases, *Penicillium vermoesenii*, infection, injuries 2258

Waste disposal, legislation, forestry, UK 2892

Waste land
- agroforestry, reclamation, India, conferences 767
- community forestry, choice of species, reclamation, India 4123
- *Madhuca longifolia*
  - reclamation
    - irrigation, India 1539
    - planting, India 1539
- multipurpose trees
  - afforestation, soil organic matter, carbon cycle, India 7561
  - reclamation, soil water, infiltration, India 8397
- reclamation
  - agroforestry, farm forestry, fuel plantations, India 7558
  - forestry development, participation, India 4092
  - sodic soils, research, India 8392

Water balance, forest trees, phytogeography, simulation 7682

Water conservation
- *Eucalyptus tereticornis*, fuel plantations, water use, India 699
- gels, afforestation, fertilizers, Yemen 153
- *Leucaena leucocephala*, agroforestry, soil conservation, India 5875
- reclamation
  - mine spoil, soil conservation, India 713
  - soil conservation, China 10082
- shifting cultivation, soil conservation, Sri Lanka 6731
- watershed management, reclamation, soil conservation, India 2395
- watersheds, development projects, erosion control, India 2394

Water erosion, soil, Sicily, losses, mapping 704

Water harvesting
- afforestation, watersheds, hydrology, Israel 8379
- *Azadirachta indica*, India, increment, biomass production 5173
- *Eucalyptus*, contour ridging, Israel, slope, aspect 9511
- runoff, afforestation, semiarid zones, Israel 6697
- species trials, savanna woodlands, rehabilitation, Kenya 6120

Water management
- afforestation, Arid Regions, Iran 1116
- bottomland forests, reclamation, UK 10081
- *Populus*, landscape, USA 7549
- saline water, agricultural land, multipurpose trees, USA 5866

Water pollution
- conifers, nitrogen cycle, simulation, USA 3625
- control, broadleaves, linear plantations, USA 9496
- *Cupressus macrocarpa*, forest litter, reservoirs, Australia 5352
- forest plantations, pesticides, Australia, buffer zones 6358
- forestry, erosion, legislation, USA 4938
- forestry practices, risk assessment, USA 3676
- forests, heavy metals, Germany 5339
- herbicides, phenoxy herbicides, Denmark, regulations 7789
- insecticides, residues, Canada 5801
- mangroves, *Rhizophora mangle*, indicator plants, mutations, assessment 9052
- methylmercury, boreal forests, Canada 3678
- nitrates, riparian forests, nitrogen cycle, USA 2890
- polycyclic aromatic hydrocarbons, mangroves, *Rhizophora mangle*, Puerto Rico, mutations 8857
- *Populus canadensis*, forest influences, riparian vegetation 3692
- surveys, acid deposition, forest influences, UK, simulation 3677

Water purification, agroforestry, irrigation, saline water, USA 10112

Water quality
- *Fagus sylvatica*, fertilizers, Germany 884
- fertilizers, simulation, USA, sewage sludge 3420
- floodplains, logging, USA 2891
- logging
  - effects, USA 347
  - erosion, streams, USA 4578
  - streams, Peninsular Malaysia 7109
- *Picea sitchensis*, afforestation, wetlands, streams, UK 4081
- *Pinus taeda*, fertilizers, poultry manure 7765
- protection forests, runoff, Russia 4603
- *Quercus ilex*, acid deposition, sulfur, logging, Spain 7548
- *Quercus petraea*, fertilizers, Germany 884
- riparian forests, forest influences, environmental degradation, USA 5346
- streams
  - coniferous forests, logging, UK 8020
  - deforestation, soil water, Brazil, simulation 8419
- wetlands, silviculture, USA 7545

Water relations (*see* Plant water relations)
- *Picea glauca*, cold storage, water stress, effects 6903

Water resources, land use, Italy 705

Water stress
- *Picea abies*, ozone 3617
- *Populus*, tissue culture, lignification 4677

Water table (*see* Groundwater)

Watering (*see* Irrigation)

Waterlogging
- broadleaves
  - tree breeding, clones, salt tolerance, Australia 3138
  - water stress, photosynthesis, pot experimentation 4685

Waterlogging *cont.*
- conifers, foliage, plant anatomy 6296
- *Eucalyptus,* salt tolerance, seedling growth, plant water relations, foliage 1115
- forest trees, plant nutrition, iron, USA 3638
- *Larix laricina,* provenance trials, site factors, France 4257

Watershed management
- agroforestry, erosion control, development projects, Haiti 7581
- controlled burning, fynbos, South Africa, mountain areas 1193
- development projects, fodder, production, India 2396
- reclamation, soil conservation, water conservation, India 2395

Watersheds
- *Acacia mangium,* forest influences, hydrology, Sabah 2908-2909
- coniferous forests
  - hydrology, simulation, USA 4084
  - mercury, deposition, Sweden 8853
- conifers
  - acid deposition, USA, pH 352
  - clear felling, USA, pH 352
  - hydrology, UK, research 702
  - soil amendments, lime, soil chemistry, UK 3414
- cycling, sulfur, forest influences 1950
- deciduous forests, cycling, potassium, USA 319
- development projects, erosion control, water conservation, India 2394
- forest influences
  - hydrology
    - Brazil, research projects 9237
    - Finland 5836
    - Slovakia, simulation 5835
    - Sweden 5836
    - USA 3685
  - runoff
    - Malawi, simulation 8870
    - Sri Lanka 2399
- forest trees, acid deposition, hydrology, Finland, acidification 6333
- forests, nitrogen cycle 1951
- hydrology
  - afforestation, water harvesting, Israel 8379
  - forest influences, streams, UK 2906
- logging
  - erosion, Peninsular Malaysia 7110
  - USA, environmental impact, assessment 8005
- management, projects, education, Cuba 4078
- mountain forests, streams, morphology, USA 6698
- *Picea,* acid deposition, interception, recovery, Sweden 6339
- *Picea sitchensis,* clear felling, UK, aluminium 353
- *Pinus radiata*
  - forest influences, hydrology, New Zealand 2910
  - forest plantations, hydrology, New Zealand 8375-8376
- *Pinus sylvestris,* hydrology, cycling, cations, Spain 8377
- *Quercus ilex,* water stress, drought, Spain 1122
- rehabilitation, choice of species, planning, Indonesia 6700

Waxes
- *Picea abies,* leaf age, forest decline, Europe 6443
- *Pinus sylvestris,* plant nutrition, foliage, morphology 1129

Weather (*see* Climate)

Weed competition
- *Fagus sylvatica,* natural regeneration, seedbeds, light, Denmark 6920
- *Gaultheria shallon,* conifers, Canada, growth 9514
- grasses, *Pinus resinosa,* planting, USA 6123

Weed control
- *Abies pindrow,* site preparation, artificial regeneration, Pakistan 5132

Weed control *cont.*
- *Acacia longifolia,* woody weeds, South Africa 8646
- *Acer rubrum,* wetlands, rights of way, USA 1754
- *Betula pendula,* seedling growth, Finland 3450
- biological control, forest plantations, New Zealand 1758
- broadleaves, herbicides, USA 942
- *Carya illinoinensis,* forest plantations, herbicides, USA 172
- conferences 7645, 8494
- coniferous forests, natural regeneration, agroforestry, sheep, USA 7583
- conifers
  - forest nurseries, bare rooted stock, management, surveys 9482
  - plant nutrition, soil fertility, Canada 7793
  - USA 8645
- *Eucalyptus,* forest plantations, increment, South Africa, simulation 7786
- *Eucalyptus citriodora,* agroforestry, livestock, Brazil 6723
- forest management, herbicides, USA 1768
- forest nurseries, New Zealand, herbicides, tolerance 8598
- forests
  - conferences 1608
  - vegetation, ecology, management, conferences 7638
- fungal diseases, *Cronartium fusiforme, Pinus elliottii,* USA 4024
- *Gliricidia sepium,* spacing, community forestry, Malawi 1786
- herbicides
  - *Eucalyptus nitens,* site preparation, nitrogen-phosphorus fertilizers, Australia 3463
  - forest plantations, New Zealand 1758
  - France 8639
  - *Picea mariana,* light, Canada, measurement 2486
  - *Pinus sylvestris,* stand density, stem form, Belarus 5156
  - *Populus* 'Conti 12', forest nurseries, Argentina 943
  - USA, handbooks 4347
- *Juglans nigra,* forest plantations, herbicides, USA 172
- manual weed control, *Pinus ponderosa,* forest plantations, USA, economics 1756
- *Mimosa pigra,* biological control, Australia, beneficial insects, *Mictis profana* 7797
- *Morus australis,* nutrient uptake, India 8642
- mulches, *Pinus ponderosa,* forest plantations, USA, economics 1756
- nurseries, ornamental woody plants, UK 1730
- *Paraserianthes lophantha,* woody weeds, South Africa 8646
- physical control, woody weeds, rangelands, USA 5147
- *Picea glauca*
  - fertilizers, Canada 1749
  - nitrogen fertilizers, irrigation, Canada 4337
- *Pinus*
  - foliage, cycling, USA 2859
  - forest plantations, USA 170
- *Pinus caribaea,* forest plantations, herbicides, phytotoxicity, Cuba 1763
- *Pinus halepensis,* forest nurseries, Algeria 5116
- *Pinus radiata,* site preparation, South Africa, botanical composition 9505
- *Pinus sylvestris,* Finland 7785
- *Pinus taeda*
  - container grown plants
    - USA
      - growth 1747
      - mortality 1747
  - forest plantations, USA, herbicides 3449
  - understorey, species diversity, USA 1765, 6124

Weed control *cont.*
- *Pinus taeda cont.*
  - USA, herbicides 2649
- *Populus,* shoot cuttings, France, herbicides 8632
- *Populus deltoides,* forest plantations, herbicides, USA 173
- *Populus tremuloides,* woody weeds, Canada, herbicides 1770
- *Pseudotsuga menziesii*
  - growth models, plant competition, USA 2710
  - stand tables, interspecific competition, USA 2709
  - woody weeds
    - USA
      - economic evaluation 171
      - simulation 171
- *Quercus,* forest plantations, herbicides, USA 172
- *Quercus rubra,* shelterwood system, underplanting, Canada 9487
- *Salix,* short rotation forestry, soil water, Canada 917
- *Tectona grandis*
  - increment, forest plantations, India 161
  - seed orchards, agroforestry, India 1554
- *Ulex europaeus,* herbicides, uptake, surfactants 8638
- woody weeds
  - *Acacia,* controlled burning, grasslands, Uganda 5362
  - *Acer macrophyllum*
    - forest plantations, USA 4349
    - herbicides, USA, statistical analysis 9515
  - *Alnus rubra*
    - biological control, Canada, *Chondrostereum purpureum* 3451
    - *Pseudotsuga menziesii,* forest plantations, USA 1764
  - biological control, New Zealand, mycoherbicides 8637
  - broadleaves
    - herbicides
      - USA 1766-1767
        - equipment 4345
    - power lines, USA 4344
  - *Bromus tectorum* 5146
  - *Buddleja davidii,* biological control, New Zealand 5142
  - conifers
    - cleaning
      - USA 2650
        - growth 2651
    - forest plantations, Russia 2642
  - controlled burning, Australia, *Mimosa pigra* 1761
  - *Cytisus scoparius,* biological control, New Zealand 8647
  - Fabaceae, biological control, South Africa 8640
  - *Kalmia angustifolia,* Canada 164
  - mountain forests, rights of way, USA 7784
  - *Pinus,* natural regeneration, USA 1769
  - *Pinus ponderosa,* herbicides, USA 4343
  - *Pinus taeda*
    - controlled burning, USA 6125
    - herbicides, USA 6125
  - *Prunus serotina,* herbicides, Germany 9513
  - rangelands
    - *Artemisia frigida,* Canada 5145
    - forest fires, grazing 7510
  - *Rubus idaeus, Picea mariana,* Canada 6931, 8633-8634
  - *Rubus parviflora,* Canada 163
  - *Ulex europaeus,* New Zealand, biological control 8636
  - USA, herbicides 8643-8644
  - wildlife, broadleaves, Norway 10070

Weeds
- *Calamagrostis canadensis,* plant competition, soil temperature, plant nutrition 5141

- **Weeds** *cont.*
  - *Chamerion angustifolium,* plant competition, soil temperature, plant nutrition 5141
  - damage, forest plantations, Indonesia 1755
  - forest trees, New Zealand, biological control, reviews 679
  - invasion, sclerophyllous forests, forest fires, Australia 8886
  - *Pinus radiata,* seedling growth, plant competition, New Zealand 4342
  - *Pinus sylvestris,* seedling growth, allelopathy, plant competition, Sweden 1759
  - *Pteridium aquilinum, Eucalyptus,* simulation, Australia 2508
  - woody weeds
    - *Acacia*
      - cycling, South Africa 6319
      - seedling growth, soil fertility, South Africa 2646
      - South Africa, control 169
    - *Acacia longifolia,* control, South Africa 8646
    - *Acacia nilotica,* biological control, insects 7789
    - biological control, *Chondrostereum purpureum* 5144
    - canopy, light penetration, Canada, control 1757
    - forest trees, biological control, New Zealand 5136
    - *Gaultheria shallon,* natural regeneration, light 4348
    - *Gleditsia triacanthos,* Australia, spread, control 168
    - invasion, fynbos, South Africa, expert systems 9359
    - *Lantana camara*
      - rain forests, Australia 2647
      - savanna woodlands, Australia 2647
    - *Liquidambar styraciflua,* plant water relations, plant competition, USA 1771
    - *Lonicera tatarica,* forests, natural regeneration, USA 5473
    - *Mimosa invisa,* Papua New Guinea, biological control 1760
    - *Mimosa pigra,* seed banks, Australia 8641
    - *Paraserianthes lophantha,* control, South Africa 8646
    - *Pinus taeda,* plant water relations, plant competition, USA 1771
    - *Prosopis,* biological control, USA, laboratory tests 167
    - *Pseudotsuga menziesii*
      - weed control
        - USA
          - economic evaluation 171
          - simulation 171
- **Weight determination**
  - equations
    - *Acacia reficiens,* irrigated stands, Kenya 5960
    - *Acacia zanzibarica,* irrigated stands, Kenya 5960
    - *Prosopis juliflora,* irrigated stands, Kenya 5960
- **Weight tables**
  - *Acacia auriculiformis,* forest plantations, Bangladesh 1001
  - *Acacia mangium,* forest plantations, biomass production, equations, Bangladesh 6975
- ***Weinmannia***
  - choice of species, forestry development, South America 2551
  - cloud forests, clear felling, plant succession, Venezuela 5458
- ***Weinmannia blumei,*** wood anatomy 414
- ***Weinmannia ilutepuiensis,*** taxonomy, Venezuela 7234
- ***Weinmannia racemosa***
  - bottomland forests, floods, canopy gaps, New Zealand 3964
  - marsupials, *Trichosurus vulpecula,* remote sensing, New Zealand, damage 471
- ***Weinmannia tomentosa,*** tropical forests, seed banks, natural regeneration, Colombia 1314
- ***Weinmannia trichosperma,*** rain forests, seed size, recruitment, Chile 7258
- ***Wendlandia***
  - geographical distribution
    - Asia 7262
    - Europe 7262
- **West Africa**
  - agroforestry 1565
  - forest trees, wood anatomy, identification, keys 490
  - Meliaceae, epidermis, morphology 394
  - multipurpose trees, choice of species, selection criteria, tree breeding, research 8186
  - rain forests, forest management, bibliographies 6794
  - savanna woodlands, land use, agroforestry, classification 9927
  - savannas, land use, agroforestry, classification 9927
  - *Tectona grandis,* plant nutrition, site class assessment, growth effects 4545
- **West Asia,** *Platanus,* palaeoecology, wood anatomy 1348
- **Western Samoa**
  - *Calliandra calothyrsus,* species trials, biomass production, increment 1668
  - *Gliricidia sepium,* species trials, biomass production, increment 1668
  - rain forests
    - forest policy, deforestation 6718
    - wind damage 6266
  - *Sesbania grandiflora,* species trials, biomass production, increment 1668
- **Wetlands,** reclamation, soil types, farm forestry, agroforestry, Australia 8410
- ***Widdringtonia,*** insect pests, *Cinara cupressi,* Malawi, biological control 8350
- ***Widdringtonia cedarbergensis,*** nature conservation, South Africa 4973
- ***Widdringtonia nodiflora,*** Malawi 6383
- ***Wikstroemia pseudoretusa,*** plant water relations, drought resistance, Japan 311
- **Wild boar** (*see* Wild pigs)
- **Wild pigs,** bottomland forests, natural regeneration, agroforestry, Croatia 3268
- **Wilderness** (*see also* Nature conservation)
  - economics, USA, conferences 2473
  - forest recreation, permits, USA 9306
  - management, USA, conferences 2467
- **Wildlife**
  - *Acer grandidentatum,* USA, ecology 690
  - *Aepyceros melampus, Acacia tortilis,* natural regeneration, Tanzania 4065
  - *Aethomys chrysophilus,* seed predation, *Acacia,* savannas, South Africa 4068
  - *Aimophila aestivalis*
    - endangered species, forest management, USA 5817
    - forest fragmentation, USA, population ecology 9217
    - *Pinus taeda,* forest management, USA, simulation 6990
  - *Aix sponsa,* cavities in trees, USA, nesting 6686
  - *Alces alces*
    - *Betula alba,* stand development, Russia 7530
    - broadleaves, browse, forests, Poland 7534-7535
    - browse, boreal forests, USA 3214
    - browsing, reviews, ecology 7523
    - Canada, telemetry, global positioning systems 9208
    - forest management, multiple use, hunting, Canada 9219
    - *Pinus sylvestris*
      - browse, Sweden 10069
      - browsing, Sweden, simulation 10071
      - browsing damage, Finland 7519
    - site preparation, herbicides, USA 9229
  - *Alouatta seniculus, Chrysophyllum lucentifolium,* seed dispersal, French Guiana, interactions 7541
- **Wildlife** *cont.*
  - *Anas,* USA, habitats 6682
  - *Apodemus flavicollis, Fagus sylvatica,* Spain 10060
  - *Apodemus sylvaticus, Juniperus thurifera,* seed dispersal, Spain 2387
  - *Artibeus jamaicensis,* Puerto Rico, feeding behaviour, foliage 6695
  - *Betula pendula,* browsing damage, Finland, resistance 3221
  - birds
    - cavities in trees
      - clear felling, Sweden 6690
      - statistical analysis, simulation 2509
    - conifers, New Zealand 6670
    - *Eucalyptus,* thinning, Australia 5822
    - forest management, multiple use, USA 8365
    - forest trees
      - herbicides, Canada 5829
      - Slovakia 10078
    - *Melaleuca quinquenervia,* Australia, urban areas 4052
    - Peru, habitats, feeding behaviour 6676
    - Phasianidae, USA, introduced species, ecology 7527
    - *Quercus pyrenaica,* Spain, feeding behaviour 8368
    - rights of way, USA 4922
    - riparian forests, reclamation, USA 4921
    - species diversity, *Prunus mahaleb,* seed dispersal, Spain 9204
  - *Bonasa bonasia, Corylus avellana,* Belgium, stand characteristics, habitats 10068
  - *Bonasa umbellus,* USA, food preferences, winter 9207
  - boreal forests
    - forest borders, clear felling, Sweden 5810
    - forest management, nature conservation, Canada 3500
    - riparian forests, Canada, species diversity 10072
  - bottomland forests, forest management, USA 7513
  - *Brachyramphus marmoratus,* North America, ecology, conservation 10066
  - broadleaves, weed control, woody weeds, Norway 10070
  - browsing damage
    - protection forests, forest economics, Germany 7533
    - riparian forests, USA 7543
  - *Cacajao calvus,* Brazil, *Eschweilera albiflora,* seed predation, seed dispersal 3115
  - *Calyptorhynchus funereus, Eucalyptus regnans,* forest management, Australia 4066
  - *Canis lupus lycaon,* USA, habitats 7526
  - *Capra pyrenaica,* browse, Spain 10058
  - *Capreolus capreolus*
    - *Abies alba,* natural regeneration, browsing damage, France 1740
    - broadleaves, browsing damage, France 1512
    - forest recreation, Germany 7537
    - Italy, biology, population dynamics 1517
    - salvage felling and logging, Norway 6694
  - *Castor canadensis*
    - Canada, animal behaviour 4904
    - USA, management, economics 8361
  - *Castor fiber*
    - broadleaves, Germany 6674
    - Croatia, habitats 4926
    - plant succession, Netherlands, foraging 2386
  - cavities in trees, forest management, reviews 1526
  - *Cebus apella, Cariniana micrantha,* seed predation, Brazil 474
  - *Cercopithecus aethiops,* seed dispersal, forests, reclamation, South Africa 3211

Wildlife *cont.*
- *Certhia familiaris,* boreal forests, fragmentation, ecology, Finland 1522
- *Cervus,* broadleaves, browse, New Zealand 9226
- *Cervus dama, Pinus sylvestris,* Poland, damage, assessment 4049
- *Cervus elaphus*
  - *Abies alba,* natural regeneration, browsing damage, France 1740
  - browsing, *Nothofagus solandri,* New Zealand 4051
  - *Pinus sylvestris,* grazing effects, forest ecology, UK 2392
  - USA, forest fires, feeding behaviour 3200
- *Cervus nippon, Fagus crenata,* natural regeneration, Japan, browsing damage 4054
- *Cervus unicolor,* broadleaves, drought, India, damage 2844
- *Chamaecyparis obtusa,* browsing damage, Japan, fences, control 7529
- clear felling, *Abies balsamea,* Canada, buffer zones 4072
- *Clethrionomys californicus*
  - *Pseudotsuga menziesii*
    - truffles, USA 7521
    - USA, habitats 7522
  - USA, forests, fragmentation 7528
- *Clethrionomys glareolus*
  - *Populus,* Germany, trapping 3212
  - *Salix,* Germany, trapping 3212
- *Colinus virginianus,* USA, habitats 6671
- *Columba leucocephala,* deciduous forests, fragmentation, USA 4059
- *Columba palumbus,* farm woodlands, hedges, UK, control 1509
- coniferous forests
  - Canada, surveys 9201
  - fertilizers, paper mill sludge, USA 4069
  - plant succession, Canada 4927
- conservation, ecology, management, India 1513
- controlled burning, fire ecology, USA, mixed forests 6380
- Corvidae, landscape, Sweden, behaviour, predation 694
- crabs, mangroves, natural regeneration, Bangladesh 7257
- damage, broadleaves, provenance trials, Sweden 4055
- dead trees
  - vegetation types
    - America 1515
    - USA, surveys 4902
- deciduous forests
  - forest ecology, fragmentation, Canada 4916
  - Poland, population dynamics 4917
  - stand characteristics, simulation, USA 4226
- deforestation, simulation, Brazil 4955
- *Dendrocopos leucotos,* mixed forests, national parks, Poland 4064
- *Dendroica kirtlandii, Pinus banksiana,* forest fires, USA 3218
- Didelphidae, seed dispersal, *Cecropia obtusifolia,* Mexico 6506
- *Dryocopus martius,* coniferous forests, fragmentation, ecology, Sweden 1521
- *Dryocopus pileatus,* feeding behaviour, dead trees, bottomland forests, USA 6680
- ecology
  - clear felling, USA 3216
  - *Dacrydium cupressinum*
    - forest management
      - clear felling, New Zealand 1507
      - selective felling, New Zealand 1508
  - forest plantations, riparian forests, South Africa 3210
  - hedges, land use, UK, species diversity 8369, 8372
  - mountain forests, Spain 8371
  - scrub, Spain 8371

Wildlife *cont.*
- ecology *cont.*
  - selective felling, statistical analysis 2502
  - virgin forests, shifting cultivation, Sierra Leone 3215
- *Erethizon dorsatum, Quercus gambelii,* USA, resource utilization 6675
- *Eucalyptus*
  - logging effects, forest ecology, Australia 3194
  - simulation, Australia 2388
- *Eucalyptus saligna,* forest plantations, understorey, Brazil 7515
- *Falco columbarius,* forest influences, UK 5825
- feeding behaviour, phenology, Brazil 3220
- *Felis concolor,* USA, habitats, fragmentation 6683
- foraging, *Formica aquilonia,* effects, *Picea abies,* Sweden 5828
- forest ecology
  - landscape, fragmentation, Australia, conferences 766
  - logging, Australia 4062
  - logging effects, nature conservation, Australia, reviews 4129
  - nature conservation, simulation 3279
  - USA, fragmentation 4907
- forest fragmentation
  - conservation, Brazil 9295
  - USA 9211
- forest management
  - Australia 10064
  - Central Europe 4913
  - conferences 4173
  - geographical information systems, simulation 236
  - Hungary 4914
  - logging, Canada 4912
  - multiple use, simulation, Australia 5020
  - *Pinus echinata,* USA 4071
  - planning
    - population dynamics, data analysis 4911
    - uncertainty 8726
  - research 4910
  - simulation, USA 6991
- forest plantations, fragmentation, forest ecology, Netherlands 4067
- forest trees
  - clear felling, USA, population dynamics 3195
  - forest management, national parks, Poland 4058
  - short rotation forestry, Germany 7540
- forestry
  - land use, UK, species diversity 6689
  - nature conservation 7512
- forests, Netherlands, ecology 1519
- frogs, rain forests, Malaysia 9222
- *Garrulus glandarius, Quercus,* seed dispersal, Germany 1307
- Geomyidae, USA, population dynamics, sampling 7671
- *Gymnobelideus leadbeateri*
  - *Eucalyptus*
    - Australia, population dynamics 5818
    - wildlife conservation, Australia 9216
  - forest management, nature conservation, Australia 4967
- habitats
  - Korea Republic 9223
  - *Quercus,* simulation, USA 4901
- *Haliaeetus leucocephalus*
  - mangroves, USA, nesting 3197
  - USA, habitats 6685
- herbicides, rights of way, woody weeds, USA 165
- India, feeding behaviour 6687
- insecticides
  - diflubenzuron, nontarget effects 673
  - malathion, Spain, effects 9197
- *Lanius,* woody plants, Spain, ecology 8373
- legislation, forestry, Peru 818
- leopards, *Acacia,* South Africa 3206

Wildlife *cont.*
- *Lepus americanus*
  - *Betula,* defence mechanisms, evolution, USA 4915
  - boreal forests
    - Canada, herbicides 4060
    - ground vegetation, Canada 9227
  - broadleaves, browsing damage, USA 4919
  - *Populus,* defence mechanisms, evolution, USA 4915
- lizards, *Pinus clausa,* clear felling, USA 4920
- *Loxodonta africana*
  - *Adansonia digitata,* browsing damage, Tanzania, simulation 4048
  - canopy gaps, tropical forests, Gabon 684
- *Loxodonta africana cyclotis, Sacoglottis gabonensis,* fruiting, Gabon 3223
- *Macaca fuscata,* broadleaves, seed production, Japan 689
- mammals
  - *Eucalyptus,* Australia 10062
  - rain forests, forest fragmentation, biodiversity, Mexico 9205
  - *Trichosurus vulpecula, Metrosideros excelsa,* New Zealand, damage 4075
- marsupials
  - *Acacia,* gums, chemistry, Australia 2978
  - *Eucalyptus*
    - Australia, population dynamics 5819
    - thinning, Australia 5822
- *Martes,* books 6783
- *Martes americana,* clear felling, Canada, boreal forests 3204-3205
- *Melanerpes,* feeding behaviour, dead trees, bottomland forests, USA 6680
- mice, *Peromyscus,* USA, habitats 7539
- *Microtus agrestis, Betula pendula,* fodder, Finland 6678
- *Microtus pennsylvanicus,* forest trees, plant succession, USA 5811
- mixed forests, USA, population dynamics 4924
- monkeys
  - feeding behaviour, Caesalpinioideae, rain forests, Zaire 9218
  - rain forests, hunting, nature conservation, Latin America 5815
- *Muntiacus reevesi,* UK, habitats, spread 10073
- nature conservation
  - forestry, India 7511
  - history, Czech Republic 6840
  - India 6673
- nature reserves
  - tropical forests
    - India
      - models 10076
      - sampling 10076
- *Nucifraga caryocatactes,* conifers, seed dispersal, Germany 1307
- *Nucifraga columbiana, Pinus flexilis,* seed dispersal, population genetics, USA 3708
- *Odocoileus hemionus*
  - clear felling, USA, habitats 8366
  - forest management
    - hunting, USA 10065
    - logging, Canada 239
  - *Quercus rubra,* plant succession, USA 3093
  - USA, repellents 3199
- *Odocoileus virginianus*
  - *Abies balsamea,* USA, browsing damage 3203
  - browse
    - management, USA 3201
    - plant succession, USA 5827
    - USA 10059
  - forest trees, browse, USA 3196
  - *Pinus strobus,* Christmas trees, USA 4370
  - riparian forests, Canada, habitats 4903

- **Wildlife** *cont.*
  - *Odocoileus virginianus cont.*
    - USA
      - ecology, management 3213
      - resting places 3202
  - *Oedura reticulata, Eucalyptus,* Australia, fragmentation 7531
  - *Oncorhynchus clarki,* grazing, livestock farming, freshwater ecology, USA 8357
  - *Oryctolagus cuniculus*
    - *Acacia oswaldii,* natural regeneration, Australia 4928
    - forest plantations, Australia, control, books 6787
  - parasitism, clear felling, landscape, USA 6911
  - Passeriformes
    - bamboos, USA, habitats, bird control 6677
    - forests, fragmentation, Spain 4063
  - periodicals 9317
  - pests, *Pinus patula,* South Africa, forest plantations, control 1516
  - *Petauroides volans, Eucalyptus regnans,* forest management, Australia 1525
  - *Petrogale penicillata,* forests, New Zealand, control, water pollution 1506
  - *Phillyrea latifolia,* seed dispersal, Spain 477
  - *Picea abies*
    - Belgium, ecology 4909
    - boreal forests, forest management, Sweden 10029
  - *Picea sitchensis,* forest plantations, UK 7542
  - *Picoides,* boreal forests, Canada, feeding behaviour 7520
  - *Picoides borealis*
    - *Pinus,* USA, habitats 5179
    - *Pinus palustris,* cavities in trees, USA 4070
    - *Pinus* (Southern), USA, management 3209
    - stand structure, USA 8367
    - USA
      - management, population dynamics 9209
      - population change 9210
  - *Picoides pubescens,* feeding behaviour, dead trees, bottomland forests, USA 6680
  - *Pinus,* forest management, Canada 4906
  - *Pinus clausa,* forest fires, clear felling, USA 9213
  - *Pinus halepensis,* fire ecology, Israel 1196
  - *Pinus jeffreyi,* seed dispersal, USA 691, 693
  - *Pinus sylvestris,* natural regeneration, damage, fungal diseases, Finland 10061
  - *Pionus maximiliani,* seed predation, Brazil 1518
  - plant succession, secondary forests, Costa Rica 4923
  - *Plecotus townsendii,* USA, ecology 3208
  - *Populus tremuloides,* geographical distribution, grazing, Canada 7268
  - *Praomys natalensis,* seed predation, *Acacia,* savannas, South Africa 4068
  - predation, forest borders, USA 9214
  - predators, seeds, rain forests, Australia 4050
  - private forestry, conservation, France 9202
  - *Pseudotsuga menziesii,* logging, USA, dead trees, ecology 2626
  - *Psittacula krameri,* broadleaved evergreen forests, nature reserves, India 696
  - Pteropodidae, *Ficus chrysolepis,* seed dispersal, Philippines 686
  - rain forests
    - Brazil, population ecology 9215
    - forest management, nature reserves, Uganda 4057
    - plant succession, Sierra Leone 1527
- **Wildlife** *cont.*
  - *Rangifer tarandus*
    - *Abies lasiocarpa*
      - lichens
        - Canada 5809
        - USA 5809
    - clear felling, Canada, ecology 687
  - *Rattus norvegicus,* damage, *Nothofagus,* natural regeneration, New Zealand 4756
  - *Ratufa indica, Ficus,* India, food plants 1514
  - *Ratufa macroura,* nature reserves, riparian forests, India 695
  - *Rhinoceros unicornis,* browsing damage, riparian forests, Nepal 692
  - *Rhinoclemmys,* vegetation types, seed dispersal, Costa Rica 6515
  - riparian forests
    - nature conservation, USA 4127
    - USA 4073
  - rodents, *Dasyprocta punctata,* seed predation, *Scheelea zonensis,* Panama 6509
  - *Saccostomus campestris,* seed predation, *Acacia,* savannas, South Africa 4068
  - salamanders, coniferous forests, stand age, Canada 9221
  - *Salix,* browsing damage, USA 5826
  - sampling, forest inventories, forest health, USA 5004
  - *Sciurus,* forest trees, UK, competitive ability 2389
  - *Sciurus aberti*
    - *Pinus ponderosa*
      - cones, USA 8359
      - USA
        - damage 432
        - feeding behaviour 6672
        - nesting 5821
  - *Sciurus ingrami,* seed predation, Brazil 10067
  - *Sciurus vulgaris*
    - coniferous forests, fragmentation, ecology, Sweden 2390
    - UK, feeding behaviour 2391
    - woodlands, fragmentation, Netherlands 6693
  - sclerophyllous forests, cavities in trees, Australia 6692
  - seasonal migration, rain forests, Mexico, habitat selection 9212
  - seed dispersal
    - reviews 1307
    - seed predation, tropical forests, Peru 685
    - tropical forests, reviews 3868
  - *Sesarma meinerti,* mangroves, forest litter, degradation, South Africa 1523
  - shifting cultivation, rain forests, Colombia 3222
  - silvicultural systems, *Eucalyptus,* Australia, logging effects 7532
  - site preparation, mechanical methods, Canada 10074
  - *Sitta europaea,* deciduous forests, fragmentation, Belgium 7514
  - small mammals
    - boreal forests, air pollution, Russia 8370
    - clear felling, North America, ecology 3193
    - forest management, USA 7517
    - rain forests, Chile, habitats 7524
    - USA, ecology 7518
  - species diversity
    - Chile, rain forests, fragmentation 3219
    - clear felling, USA 1510
    - forest fragmentation, USA 10075
    - *Populus fremontii,* riparian forests, USA 8362
    - *Populus tremuloides,* Canada 3217
    - *Tamarix chinensis,* riparian forests, USA 8362
  - squirrels, *Sciurus granatensis,* seed predation, *Scheelea zonensis,* Panama 6509
  - *Stenocereus griseus,* fruits, predation, Venezuela 6514
- **Wildlife** *cont.*
  - *Strix occidentalis*
    - conservation, forest economics, USA 732
    - USA, nesting, habitats 6684
  - *Strix occidentalis caurina,* nature conservation, forest economics, USA 5820
  - *Sula abbotti,* nature conservation, mined land, reclamation, Christmas Island 3234
  - *Sus scrofa,* vegetation types, Spain, habitats 7516
  - sustainability, tropical forests, hunting, measurement 697
  - *Tamiasciurus hudsonicus*
    - coniferous forests, USA, ecology 3207
    - *Pinus contorta,* Canada, prevention 1511
  - *Tetrao parvirostris, Larix gmelinii,* Russia, feeding behaviour 8360
  - *Tetrao tetrix,* forest management, decision making, simulation 9200
  - *Tetrao urogallus*
    - boreal forests, Finland 4061
    - forest management, UK 4929
    - Germany, habitats 6688
    - Italy, ecology 698
    - *Pinus sylvestris*
      - foliage, browse, Norway 4056
      - UK 688
  - *Thomomys*
    - USA
      - control 9228
      - vegetation 7918
  - *Thomomys talpoides,* conifers, USA, damage 6922
  - trapping, Germany 10079
  - *Trichosurus caninus*
    - Australia
      - simulation
        - forest fragmentation 8363-8364
        - population dynamics 8363
        - population genetics 8364
  - *Trichosurus vulpecula*
    - forest trees, remote sensing, New Zealand, damage 471
    - forests, New Zealand, control, water pollution 1506
  - tropical forests
    - logging, nature conservation 9296
    - Peninsular Malaysia, logging effects 9203
    - seed dispersal
      - Indonesia 1403
      - Uganda 8953
  - *Turdus, Juniperus thurifera,* seed dispersal, Spain 2387
  - *Ursus americanus*
    - Canada, animal behaviour 8358
    - USA, habitats, assessment 4074
  - vegetation types
    - forest ecology, Finland 4918
    - forest fires, Canada 9220
    - USA 9224
  - *Vireo atricapillus,* scrub, USA, habitats 4925
  - *Vombatus ursinus,* forest trees, Australia 10063
  - *Wallabia bicolor*
    - *Eucalyptus regnans,* tree guards, damage 6691
    - forest trees, browsing damage, seedlings 5823
  - water quality, conifers, forest ecology, USA 2170
  - woodlands, nature conservation, UK 3277
  - *Xenosaurus grandis,* tropical forests, Mexico, ecology 6696
- **Wildlife conservation**
  - biodiversity, nature conservation, management, India 5894
  - China 7544
  - forest management, Australia 9230-9231
  - *Gymnobelideus leadbeateri,* forest fires, Australia, simulation models 9225
  - marsupials, *Gymnobelideus leadbeateri, Eucalyptus,* Australia 9216

Wildlife conservation *cont.*
- national parks, public opinion, rural communities, Nepal 8442
- *Phylica nitida,* deforestation, grazing, control, Indian Ocean Islands 9297
- Romania 7596

Willughbeia, rain forests, improvement planting, economics, Indonesia 4109

Willungia maslinensis, foliage, morphology, palaeobotany, taxonomy, Australia 497

Willungia oppositifolia, foliage, morphology, palaeobotany, taxonomy, Australia 497

Wilts (*see* Fungal diseases)

Wind
- broadleaved evergreen forests, forest fires, South Africa 2134
- broadleaves, stems, mechanics, Japan 1221
- *Eucalyptus regnans,* wood density, stem form 351
- forest influences, simulation 3339
- forest trees, movement, simulation, mechanics 4642
- *Fraxinus excelsior,* wood anatomy, growth stress 7114
- *Nothofagus solandri,* stand development, New Zealand 4797
- rain forests, precipitation, canopy, Australia, simulation 7123
- simulation, USA, smoke, movement 3695
- stand characteristics, canopy, simulation, air flow 3534
- topography, UK, measurement, methodology 2802
- turbulence, *Picea sitchensis,* stems, mechanics, UK 6271

Wind damage
- *Abies alba,* stems, Italy 280
- *Acacia,* defoliation, seasonal variation, soil salinity, Cape Verde 1883
- biomass, nutrient reserves, Puerto Rico 996
- broadleaves
  - plant succession, plant colonization, USA 277
  - rain forests, Puerto Rico 3561
  - stand structure, USA, growth 277
- canopy gaps, thematic mapper, Brazil 3566
- Caribbean 1065
- *Chamaecyparis thyoides,* microrelief, wetlands, USA 7875
- classification, forest management, UK 6265
- conifers, stems, Japan, shakes, distribution 9678
- *Cryptomeria japonica,* stems, plant morphology, Japan 4479
- cycling, Caribbean 1072
- *Dacryodes excelsa*
  - biomass production, simulation, Puerto Rico 1071
  - soil chemistry, simulation, Puerto Rico 1071
- dangerous trees, assessment, street trees 10152
- deciduous forests, forest ecology, natural regeneration, Madagascar 6268
- forest fires, USA 2912
- forest litter
  - cycling, Puerto Rico 1067
  - seedlings, Puerto Rico, botanical composition 1077
- forest management, UK 6273
- forest plantations, Réunion, hurricanes 9674
- forest trees
  - Netherlands 1062
  - Puerto Rico 1073
  - stand characteristics, reviews 8759
  - topography, Japan, analysis 7035
- history, Germany 9383
- insect pests, ecology, canopy gaps, Puerto Rico 3177
- mangrove forests, USA 4481
- *Manilkara bidentata,* stand structure, recruitment, Puerto Rico 1076
- Mexico 1081
- mountain forests, topography, Jamaica 1080
- natural regeneration, Caribbean 1082

Wind damage *cont.*
- old-growth forests, canopy gaps, USA 6567
- *Picea abies,* silvicultural systems, shelterwood system, Sweden 3559
- *Picea glauca,* increment, dendrochronology, Canada 3484
- *Picea sitchensis*
  - fertilizers, UK 3564
  - stems, mechanics, UK 6272
- *Pinus sylvestris*
  - simulation, Finland 6822
  - thinning, fertilizers, snow damage, Sweden 3560
- *Pinus taeda*
  - crown, USA, simulation 9680
  - plant water relations, wood strength, USA 1061
- *Prestoea montana,* bottomland forests, Puerto Rico 1066
- *Prosopis,* defoliation, seasonal variation, soil salinity, Cape Verde 1883
- protection, urban forestry, USA 10142
- rain forests
  - forest litter, soil chemistry, Puerto Rico 6292
  - Guadeloupe 1063
  - Puerto Rico 276
  - Western Samoa 6266
- roots, dynamics, Puerto Rico 1068
- salt spray, ornamental woody plants, damage, testing 8850
- seed dispersal, tropical forests, Puerto Rico 1335
- simulation
  - Puerto Rico 2801
  - USA 2801
- soil chemistry, gas exchange, Puerto Rico 1070
- tropical forests, roots, cycling, Puerto Rico 3562
- understorey, light, Puerto Rico, pioneer species 1075
- United States Virgin Islands 1078
- USA 1079
- vegetation types
  - canopy, Puerto Rico 1074
  - USA 4480

Wind resistance, bending, *Pinus sylvestris,* Finland 7033

Wind speed
- *Azadirachta indica,* shelterbelts, crops, Niger 8383
- control, protection, shelterbelts, mathematical models 8502
- fire behaviour, mathematics 368

Windbreaks (*see* Shelterbelts)

Winter hardiness (*see* Frost resistance)

Winter injury (*see* Frost injury)

Wisteria sinensis
- root nodules, nitrogen fertilizers, seedling growth 5288
- stems
  - mechanics 9797
  - roots, mechanics 9797

Witches' brooms
- *Betula pubescens,* UK 5662
- forest trees, dwarfism, morphogenesis 6397
- fungal diseases, *Taphrina betulina, Betula pubescens,* increment, UK 5663
- *Ulmus minor,* mycoplasmal diseases, Italy 5670

Withania somnifera, tissue culture, micropropagation 869

Wolves, *Canis lupus lycaon,* USA, habitats 7526

Women
- forestry, New Zealand 4243
- rain forests, forest policy, Latin America 7630

Wood
- anatomy, *Gnetum gnemon* 3722
- *Populus* 'Robusta', biochemistry, starch, metabolism, seasonal variation 2988

Wood anatomy
- *Abies,* palaeoecology, Japan 8990
- *Abies alba,* juvenile wood 2017
- *Abies concolor,* genetic variation, USA 5387

Wood anatomy *cont.*
- *Abies sachalinensis*
  - cell differentiation, tracheids 6411
  - Japan, tree breeding 2032
- abnormal development, *Fagus sylvatica,* discoloration, injuries 1214
- *Acacia,* growth rings, Africa, rain 396
- *Acanthopanax sciadophylloides,* growth effects 4582
- Araliaceae 8068
- *Argemone fruticosa* 2023
- Bangladesh, timbers 401-403
- bibliographies, dicotyledons 762
- books, dicotyledons 762
- Brazil, forest trees 6430
- broadleaves
  - Japan, growth effects 7115
  - rain forests, Mexico 1211
  - rays 2029
  - wood properties, methodology, boring 2494
- *Bruguiera gymnorrhiza,* Vietnam 4641
- *Callitris,* tracheids 2025
- cambium, books 5924
- *Cecropia glaziou*i, pollution, Brazil 6325
- cell differentiation, *Pinus sylvestris,* cambium, enzymes, proteinases 9854
- cell walls
  - microfibrils, techniques 4643
  - *Pinus radiata,* plus trees, fracture, lignin 4814
  - reviews 4656
  - tree breeding, reviews 3985
- cellulose, analysis, techniques 7658
- conferences 1604
- *Cryptomeria japonica*
  - clones
    - genetic variation 6587
    - growth rings, genetic variation 4591
  - Japan, growth, wood properties 9793
  - variation, physiology 2028
- development, *Betula pendula,* UK, growth effects 1988
- dicotyledons, climate, North America 268
- *Diospyros,* colour, fungi 4628
- *Dryobalanops,* identification 6406
- *Eucalyptus,* wood chemistry, reaction wood, lignin 5375
- *Eucalyptus globulus,* xylem, fibres, differentiation 4627
- Fabaceae
  - phylogeny, keys 8906
  - taxonomy 8905
- *Faidherbia albida,* growth rings, Africa, rain 396
- fibres
  - bamboos, *Gigantochloa scortechinii,* wood chemistry, Malaysia 204
  - broadleaves, reaction wood, growth stress 4585
  - measurement 4655
- *Ficus,* hydraulic conductivity, life form, Panama 5373
- forest trees, wood properties 6428, 7153
- *Fraxinus excelsior,* wind, growth stress 7114
- *Fraxinus mandshurica*
  - fibres, cell walls, reaction wood 6412
  - pits 2026
  - tension wood 8891
- fungal diseases, *Inonotus hispidus, Fraxinus excelsior* 2968
- growth effects, *Populus* 'I-214', reaction wood, France, wood defects 4586
- growth rings
  - calcium oxalate, crystals 396
  - image analysis, computer techniques 22
- *Heliocarpus appendiculatus,* wood density, Costa Rica 8900
- identification, forest trees, keys, West Africa 490
- India, secondary timbers 4673
- Japan, timbers 5383
- *Jeffersonioxylon gordonense,* taxonomy, new taxa, Antarctica 8072
- *Knightia excelsa,* New Zealand 1213
- *Larix,* identification 495
- *Larix decidua,* reaction wood 2016

Wood anatomy *cont.*

- *Larix leptolepis,* Japan, growth effects, site factors, spiral grain 7116
- lignification
  - *Picea abies,* fertilizers 5345
  - wood chemistry 1223
- Meliaceae, Indonesia 6407
- Mexico, broadleaves 4629-4630
- microfibrils, techniques 4185
- mistletoes, host parasite relationships 6641
- *Myrica rubra,* growth effects 4582
- Myrtaceae 2939
  - South America 6415
- old and fossil wood, Fabaceae, Mexico 2022
- parenchyma, Pinaceae 4625
- *Picea*
  - identification 495
  - palaeoecology, Japan 8990
- *Picea abies*
  - drought, soil, minerals, Germany 2897
  - juvenile wood, variation 2898
- *Picea glauca,* Canada, environmental factors 3684
- *Picea sitchensis,* provenance, growth, quality 8558
- *Pinus densiflora,* tumours 397
- *Pinus sylvestris*
  - foliage, weight, climate, correlation 8058
  - reaction wood 2016
- *Platanus,* palaeoecology, West Asia 1348
- *Platanus kerrii* 8070
- *Populus canadensis,* variation, age, site factors 1986
- *Populus* 'I-214', variation, age, site factors 1986
- *Populus* 'Koltay', variation, age, site factors 1986
- *Populus* 'Kopecky', variation, age, site factors 1986
- *Populus nigra × Populus maximowiczii,* lignin, cell walls, lignification 3714
- *Quercus,* palaeoecology, Japan 8990
- *Quercus cerris,* plant water relations, cavitation 7068
- *Quercus petraea,* growth rings, Poland 4636
- *Quercus velutina*
  - branchwood 2027
  - roots 2027
  - stems 2027
- *Rapanea,* rays 2024
- rays
  - cell differentiation, *Ficus sycomorus* 2957
  - differentiation, reviews 6413
  - *Fraxinus excelsior,* wood strength 2968
  - grain and figure
    - *Picea abies* 389
    - *Pinus sylvestris* 389
  - stems, mechanics 1218
- *Rhizophora apiculata,* Vietnam 4641
- *Robinia pseudoacacia,* injuries, tyloses 398
- Sapindaceae, China 8069
- Saururaceae, phylogeny 8073
- secondary timbers, Indonesia 414
- *Shorea,* taxonomy, identification, Philippines 412
- softwoods, identification 8066
- spiral grain, *Picea mariana,* variation 6417
- *Strombosia glaucescens,* Ghana 6402
- *Tapirira,* taxonomy 8057
- timbers, identification, Cameroon 1216
- *Toronia toru,* New Zealand 1213
- tracheids
  - *Abies sachalinensis,* microtubules, cellulose 400
  - cell walls, *Pinus radiata,* genetic variation, New Zealand 3735
- tyloses, suberin, broadleaves 7160
- vessels
  - *Ephedra campylopoda,* cell differentiation 4658
  - *Fagus sylvatica*
    - cambium 2945

Wood anatomy *cont.*

- vessels *cont.*
  - *Fagus sylvatica cont.*
    - climate, Switzerland 8894
  - plant water relations
    - evolution 4621
    - plant ecology, Venezuela 4622
  - *Quercus,* earlywood, France 4639
  - variation, latitude 4623
- video techniques 5947
- Vietnam, timbers 4662
- wetwood, *Quercus crispula* 8895

Wood borers (*see* Insect pests)

Wood chemistry (*see also* Plant composition)

- *Abies koreana,* lignans 1240
- *Abies mariesii,* lignans 3744
- *Acacia karroo,* chemotaxonomy, flavonoids 9835
- *Aralia bipinnata*
  - lignans 9840
  - phenolic compounds 9837
- *Arenga pinnata,* Indonesia 2058
- bamboos
  - *Gigantochloa scortechinii,* wood anatomy, fibres, Malaysia 204
  - lignin 6450
- *Betulaceae,* chemotaxonomy 4664
- *Bischofia javanica,* extractives, steroids 1237
- broadleaves, Indonesia 6448
- carbon, isotopes, *Pinus strobus,* water stress, USA 7660
- *Castanea sativa,* age, tannins 8089
- cell walls, hemicelluloses 425
- *Chosenia arbutifolia,* extractives, lignans 428
- *Cocos nucifera,* Indonesia 2058
- conifers, growth rings, dendrochronology 7616
- *Cryptomeria japonica,* clones, genetic variation, Japan 7341
- *Cupressus lusitanica,* tissue culture, metabolites 418, 5395
- *Eucalyptus,* wood anatomy, reaction wood, lignin 5375
- extractives
  - *Pinus contorta* 4669
  - *Pinus nigra,* varieties 8913
  - *Salix sachalinensis,* lignans, esters 1238
  - *Schinopsis balansae,* heartwood 6459
- *Fagus sylvatica,* growth rings, Germany, nickel, seasonal variation 2976
- forest plantations, hardwoods, USA 8919
- forest trees
  - esters 1253
  - heartwood, injuries, discoloration, trace elements 8092
- hardwoods, lignin 6450
- heavy metals
  - *Fagus sylvatica,* air pollution, Germany, seasonal variation 6343
  - *Quercus petraea,* air pollution, Germany, methodology 7653
  - *Quercus robur,* air pollution, forest decline, Poland 7095
- Indonesia, broadleaves 2059
- lignans, *Abies pinsapo,* medicinal plants, cytotoxicity 5400
- lignification, wood anatomy 1223
- limonoids, *Toona ciliata,* chemotaxonomy, insect pests, resistance 3742
- oleoresins, *Pinus radiata,* genetic variation, New Zealand 4823
- *Phoeba porosa,* essential oils, Brazil 9801
- *Pinus,* growth rings, Italy 1249
- *Pinus densiflora,* trace elements, *Bursaphelenchus xylophilus, Monochamus alternatus* 2977
- *Populus* 'Robusta'
  - defoliation, seasonal variation 3780
  - girdling, seasonal variation 3780
- *Poraqueiba,* sesquiterpenoids 9838
- *Protium tenuifolium,* Brazil, lignans 9819
- *Quercus*
  - ellagitannins, distribution 4663
  - heartwood, age, tannins 8090
  - variation, height 9824

Wood chemistry *cont.*

- *Quercus coccinea,* fertilizers, lime, dendrochronology, USA 1590
- *Quercus petraea,* age, tannins 8089
- *Robinia pseudoacacia,* carbohydrates, flavonols, coumaric acids 2981
- *Schinopsis balansae,* tannins 6447
- softwoods, lignin 6450
- sugars, methodology 4668
- Taxodiaceae, proteins 3786
- trace elements, extractants, *Pinus sylvestris,* air pollution, Germany 9843

Wood defects

- *Eucalyptus,* injuries, Australia 5344
- spiral grain
  - *Picea abies,* Denmark 3683
  - *Pinus radiata,* genetic variation, wood density, New Zealand 4822

Wood density

- *Abies sachalinensis,* Japan, tree breeding 2032
- *Eucalyptus regnans,* stem form, wind 351
- *Eucalyptus saligna,* Brazil, equations, age 9583
- *Gmelina arborea,* seedling growth, nitrogen-phosphorus fertilizers, latosols 134
- *Heliocarpus appendiculatus,* wood anatomy, Costa Rica 8900
- *Joannesia princeps,* statistical analysis, growth effects 1179
- *Picea abies,* spacing, Sweden 9757
- *Picea mariana,* Canada, variation, methodology 2896
- *Picea sitchensis,* genetic variation, clonal variation, Denmark 567
- *Pinus banksiana,* thinning, increment, Canada 6364
- *Pinus patula*
  - progeny testing
    - Belize 3979
    - Colombia 3979
- *Pinus radiata,* genetic variation, spiral grain, New Zealand 4822
- *Pinus taeda*
  - gene mapping 5508
  - tree breeding, early selection, USA 1430
- *Pseudotsuga menziesii*
  - genetic variation, USA, increment 2182
  - tree breeding, phenology, USA 4829
- *Tsuga heterophylla,* growth rings, USA 1178

Wood moisture

- *Abies sachalinensis,* Japan, tree breeding 2032
- *Cryptomeria japonica,* genetic variation, heartwood, Japan 6592

Wood properties

- *Betula pendula*
  - spacing, Finland 9531
  - thinning, stems, quality, Western Europe 9519
- broadleaves, wood anatomy, methodology, boring 2494
- *Bruguiera gymnorrhiza,* Vietnam 4641
- correlation, growth rings, statistical analysis 31
- *Cryptomeria japonica*
  - genetic variation
    - clones, spacing 9758
    - Japan 560
  - measurement, techniques 4386
- *Cupressus,* tree breeding, farm forestry, New Zealand 4830
- *Eucalyptus delegatensis,* provenance trials, New Zealand 4592
- *Eucalyptus tereticornis,* air pollution, India 1987
- forest trees
  - choice of species, forest management, Venezuela 6025
  - silviculture, genotypes, reviews 8008
  - wood anatomy 6428
- *Gmelina arborea*
  - seedling growth, fertilizers 127
  - seedlings, nitrogen-phosphorus fertilizers, latosols 135

- **Wood properties** *cont.*
  - growth effects
    - conifers, Russia 9756
    - *Eucalyptus grandis,* tree breeding, South Africa 575
  - *Larix decidua,* pruning, knots, diameter, Poland 1983
  - *Larix olgensis,* provenance trials, China 4583
  - *Paulownia fortunei,* clones, China 4259
  - *Picea abies*
    - forest plantations, agricultural land, pulpwood production, Sweden 8007
    - growth models, site factors, quality 8863
  - *Picea glauca,* genetic variation, Canada 559
  - *Picea mariana,* increment, spacing, Canada 1182
  - *Picea sitchensis*
    - silviculture, Northern Ireland 7117
    - spacing, growth effects, UK 2655
  - *Pinus*
    - Australia
      - genetic variation 7113
      - site factors 7113
  - *Pinus banksiana,* tree breeding 8201
  - *Pinus caribaea,* provenance trials, Australia 6866
  - *Pinus patula*
    - progeny testing, South Africa 1425
    - provenance, South Africa 4633
  - *Pinus* (Southern), forest plantations, short rotation forestry, USA, conferences 2459
  - *Pinus sylvestris*
    - height, Poland, equations 3681
    - natural regeneration, artificial regeneration, increment, Sweden 7120
    - pruning, knots, diameter, Poland 1983
    - vegetation types, Poland 4596
  - *Pinus taeda*
    - spacing, USA 4587
    - stand density 4593
    - thinning, USA 4587
  - *Prosopis,* silvicultural systems, Argentina 7119
  - *Pseudotsuga menziesii,* pruning, Germany 8859
  - quality, *Pinus sylvestris,* resin tapping, research, Poland 1984
  - *Quercus*
    - genetic variation, France 4595
    - silviculture, simulation, France 4588
  - resinous wood, *Pinus sylvestris,* girdling, Sweden 3682
  - *Rhizophora apiculata,* Vietnam 4641
  - *Shorea,* forest plantations 350
  - shrinkage, *Pseudotsuga menziesii,* progeny testing, Canada 3984
  - variation, *Eucalyptus,* species, provenance, Malawi 4192
- **Wood strength**
  - conifers, branches, Japan, testing 4632
  - elasticity, *Fraxinus excelsior,* wood anatomy, rays 2968
  - *Pinus taeda,* wind damage, plant water relations, USA 1061
- ***Woodfordia fruticosa***
  - shoot cuttings, erosion control, India 95
  - tissue culture, micropropagation 5087
- **Woodlands**
  - afforestation, land use, UK, books 6776
  - fragmentation, squirrels, *Sciurus vulgaris,* Netherlands 6693
  - remote sensing, Australia 3526
- **Woody plants**
  - Acari, foliage, morphology, Australia 621
  - afforestation, mined land, reclamation, species trials, New Caledonia 9247
  - air pollution, UK, susceptibility 3651
  - allelopathy, reviews 8174
  - angiosperms, palaeoecology, Antarctica 8143
  - birds, *Lanius,* Spain, ecology 8373
  - books 3299
  - branches, foliage, habit, New Zealand 4620
  - broadleaves, foliage, toughness 1230
- **Woody plants** *cont.*
  - carbon dioxide enrichment, plant physiology, reviews 2800
  - cell walls, structure, mechanics, toughness 8049
  - chaparral, nutrition physiology, nutrient allocation, USA 2853
  - checklists, Sri Lanka, books 3300
  - ecosystems, agroforestry, semiarid zones, Sahel, books 8466
  - erosion control, China, sand stabilization 9245
  - flora, Greece 1325, 7243
  - foliage, light, Estonia, measurement, plant morphology 4660
  - forest litter, decomposition, vegetation types, Spain 2821
  - fruits, boreal forests, Canada, plant composition 8673
  - geographical distribution
    - Asia 7262
    - climate, simulation, USA 3070
    - Europe 7262
  - invasion, choice of species, fynbos, South Africa, expert systems 9359
  - Mali 3299
  - maquis, biomass distribution, France 2152
  - mites, foliage, mutualism, Korea Republic 3172
  - monographs 2
  - natural regeneration, artificial regeneration, farm forestry, Australia 7687
  - nomenclature, uses, ethnobotany, reserved forests, Tanzania 964
  - oilseed plants, choice of species, land development, India 1657
  - plant colonization, simulation, *Juniperus* 3097
  - plant genetic resources, conservation, Denmark 8187
  - plant nutrition, plant composition, proteins, nitrogen 3758
  - plant physiology, measurement, stable isotopes 9335
  - rain forests, phenology, climate, Chile 2930
  - seed banks, seed germination, viability, USA 2097
  - seeds, survival, simulation, fire effects 3330
  - shoot cuttings, plant growth regulators 1258
  - species diversity
    - climate, Southern Africa 2150
    - vegetation types, Temperate Zones 2149
  - stomata, density, taxonomy, habitats 8061
- **Woody weeds**
  - birds, herbicides, rights of way, USA 165
  - conifers, forest plantations, plant competition, height, diameter 6126
  - control
    - *Kalmia angustifolia,* Canada 164
    - *Pinus taeda*
      - controlled burning, USA 6125
      - herbicides, USA 6125
    - *Rubus parviflora,* Canada 163
  - *Lonicera japonica,* USA, *Liquidambar styraciflua* 6122
  - *Parthenocissus quinquefolia,* USA, *Liquidambar styraciflua* 6122
  - *Sapium sebiferum,* biomass production, controlled burning, USA 2696
- **Work study**
  - activity sampling, statistical analysis 30
  - brush cutters, Canada 9548
  - harrows, site preparation, Canada 9547
  - *Pinus sylvestris,* pruning, selection methods, Poland 6130
  - planting, beating up, Canada 7771
  - *Pseudotsuga menziesii,* pruning, Canada, economics 4358
  - site preparation
    - implements, Canada 8669
    - scarifiers, Sweden 9551
- **Working plans,** forest management, national parks, Germany 9618
- **World**
  - afforestation, projects, carbon cycle, forest influences, atmosphere 8013
  - forest decline, reviews 5418
  - forestry
    - carbon cycle, climatic change, global warming 9661
    - reviews 9369
- **World Bank,** forestry development, investment, India 51
- **Wounds** (*see* Injuries)
- ***Wrightia tinctoria,*** tissue culture, micropropagation, explants, culture media 6055
- ***Wrightia tomentosa,*** tissue culture, micropropagation 5082
- ***Xanthogaleruca luteola*** (*see Pyrrhalta luteola)*
- ***Xanthomonas campestris***
  - bacterial diseases
    - *Populus,* clones, resistance, Netherlands 1465
    - *Salix dasyclados,* clones, resistance, Netherlands 1465
- ***Xanthomonas populi***
  - bacterial diseases
    - *Populus*
      - Belgium, research 611
      - clones, resistance, Netherlands 1465
    - *Salix dasyclados,* clones, resistance, Netherlands 1465
- ***Xanthorrhoea acaulis,*** natural regeneration, artificial regeneration, farm forestry, Australia 7687
- ***Xanthorrhoea australis,*** sclerophyllous forests, natural regeneration, fungal diseases, *Phytophthora cinnamomi,* Australia 3954
- ***Xanthorrhoea resinifera,*** nomenclature, Australia 3853
- ***Xenosaurus grandis,*** lizards, tropical forests, Mexico, ecology 6696
- ***Xiphinema basiri,*** plant parasitic nematodes, *Leucaena leucocephala,* India 1497
- ***Xyleborus validus,*** insect pests, *Cryptomeria japonica,* Japan 7474
- ***Xylella fastidiosa***
  - bacterial diseases
    - *Quercus,* USA 2288
    - *Quercus macrocarpa,* USA, new host records 8314
    - street trees, USA 8314
    - *Ulmus,* USA, damage 4023
  - plant pathogenic bacteria, amenity trees, USA 2286
- ***Xylia kerrii,*** root cuttings, Bangladesh 6045
- ***Xylia xylocarpa,*** seeds, chemistry, edible species, India 6946
- ***Xylocarpus granatum***
  - afforestation, erosion control, India 3225
  - foliage, light, Australia, phenolic compounds 434
  - mangroves, foliage, Kenya, chemistry 4676
- ***Xylocarpus mekongensis***
  - afforestation, erosion control, India 3225
  - mangrove forests, increment, diameter, natural regeneration, Bangladesh 6177
  - natural regeneration, crabs, Bangladesh 7257
  - underplanting, mangroves, forest plantations, sustainability, Bangladesh 6108
- ***Xylocopa valga,*** insect pests, *Taxodioxylon gypsaceum,* old and fossil wood, Italy, damage 1492
- ***Xylocopa violacea,*** insect pests, *Taxodioxylon gypsaceum,* old and fossil wood, Italy, damage 1492
- ***Xylomelum angustifolium,*** reproductive behaviour 2101
- ***Xylomelum occidentale,*** reproductive behaviour 2101
- ***Xylosandrus brevis,*** insect pests, *Lindera triloba,* Japan, symbionts 8339
- ***Xylosandrus crassiusculus,*** insect pests, *Lindera triloba,* Japan, symbionts 8339
- ***Xylosma longifolium,*** wood anatomy, rays 2029

Xyloterus lineatus (*see Trypodendron lineatum*)

Yeasts, *Prosopis,* exudates, Argentina 9065

Yemen
- afforestation, water conservation, gels, fertilizers 153
- medicinal plants, books 3295

Yield forecasting
- conifers, mixtures, site class assessment, Canada 5177
- estimation, *Populus* 'Robusta', statistical analysis 6959
- *Eucalyptus,* growth models, Australia 6193
- forest inventories, conferences 5939
- forest plantations, stand development, growth models, Germany 4222
- forest trees
  - remote sensing, simulation, Estonia 1866
  - simulation, Canada 4200
- growth models 9601
- *Picea abies,* air pollution, nitrogen, soil fertility, Sweden 7981
- *Picea glauca,* site factors, Canada, plant height 3489
- *Picea mariana,* advance growth, height, Canada 9491
- *Picea sitchensis,* UK, simulation 2694
- *Pinus,* Zimbabwe, simulation 6830
- *Pinus radiata,* volume, assortments, South Africa, equations 216
- *Pinus resinosa*
  - economic analysis, USA, computer techniques 4229
  - forest management, USA, sustainability 2523
  - forest plantations, thinning, growth models, Canada 5966
- *Pinus sylvestris,* groundwater, Belarus 8714
- *Quercus,* thinning, USA 2712
- selection system, forest management, Japan, planning 4411
- USA 8541

Yield regulation
- forest management, sustainability, history 8513
- Russia 8715

Yield tables
- *Alnus glutinosa,* Germany 8713
- broadleaves, stand characteristics, plant competition, simulation 6832
- conifers, stand characteristics, plant competition, simulation 6827
- *Cupressus lusitanica,* Costa Rica 6986
- *Ostrya carpinifolia,* coppice, Italy 2711
- *Picea abies,* site class assessment, air pollution, Germany 9602
- *Pinus halepensis,* silviculture, France 6987
- *Pinus pinaster,* site class assessment, Portugal 1844
- *Pinus pinea,* stand characteristics, plant competition, simulation 6831
- *Populus,* UK 4416
- *Pseudotsuga menziesii,* Switzerland, estimation 4412

Yields, silvicultural systems, UK 6091

Yugoslavia (*see also* Bosnia-Hercegovina; Croatia; Slovenia)
- forest fires 365
- insect pests
  - *Lymantria dispar, Robinia pseudoacacia,* pathogens 2325
  - *Oxycarenus lavaterae, Tilia cordata* 2314
- *Pinus sylvestris,* provenance trials, IUFRO 831
- riparian forests, surveys 534

Yushania niitakayamensis, bamboos, population genetics, Taiwan, random amplified polymorphic DNA 5547

Zaire
- *Acacia*
  - biology, utilization, multipurpose trees, research 185
  - genetic variation, population genetics 2208
- browse plants, surveys 8680

Zaire *cont.*
- Caesalpinioideae, rain forests, soil pH, monkeys 9218
- *Daniellia pynaertii,* pollination, monkeys 4737
- forest trees
  - improvement planting, biomass, growth 6981
  - medicinal plants 7808
- *Maesobotrya,* taxonomy, nomenclature 5426
- multipurpose trees, species trials 8566
- *Sesbania sesban,* root nodules, surveys, oxisols 2240
- tropical forests, remote sensing, radiometry, mapping 6230

Zambia
- *Acacia,* seed banks 3962
- *Brachystegia manga,* savanna woodlands, natural regeneration, soil chemistry, charcoal 5239
- broadleaves, seed germination, seedling growth, soil chemistry, carbon 5239
- forest trees, savanna woodlands, phenology, plant nutrition 6308
- *Julbernardia globiflora,* savanna woodlands, natural regeneration, soil chemistry, charcoal 5239

Zamia furfuracea
- cones
  - chemistry, toxins 3835
  - pollination, insects, sex 3835

Zanthoxylum ailanthoides, pioneer species, topography, plant morphology, Japan 8765

Zanthoxylum chalybeum, medicinal plants, Tanzania 5166

Zanthoxylum rhoifolia, wood anatomy 6430

Zanthoxylum simulans, micropropagation 111

Zanthoxylum zanthoxyloides, medicinal plants, tissue culture, callus, metabolites, isoquinoline alkaloids 2579

Zapoteca, plant composition, amino acids, chemotaxonomy, evolution 8958

Zeiraphera canadensis
- insect pests
  - *Picea glauca*
    - Canada 5722, 7448
      - ecology 5694
      - resistance 2319
      - reviews 3180
    - phenology, Canada 647

Zeiraphera diniana, insect pests, *Pinus contorta,* UK 7453

Zelkova
- geographical distribution 1350
  - Asia 7262
  - Europe 7262
- palaeoecology, plant succession, Greece 8989

Zelkova serrata
- wind damage, salt spray, damage, testing 8850
- wood anatomy, Japan, growth effects 7115

Zethenia rufescentaria, insect pests, *Larix leptolepis,* Japan, natural enemies 9157

Zimbabwe
- *Acacia gerrardii,* reclamation, fly ash 7564
- *Adansonia digitata,* plant disorders, fungal diseases, *Capnodendron* 7203
- *Baikiaea plurijuga,* woodlands, ecology, bibliographies 7634
- *Brachystegia spiciformis*
  - savanna woodlands, biomass, estimation 6960
  - woodlands, ecology, bibliographies 7634
- broadleaves
  - forest influences, soil fertility, savannas 6369
  - plant competition, savanna woodlands 4802
- *Colophospermum mopane,* diameter, increment, site factors, growth effects 7121
- *Combretum apiculatum,* diameter, increment, site factors, growth effects 7121

Zimbabwe *cont.*
- deforestation, forest resources, non-wood forest products 8417
- *Eucalyptus camaldulensis,* progeny testing, genetic gain, essential oils 2201
- *Eucalyptus grandis,* soil organic matter, forest litter, soil fertility 2812
- forest trees, history, research 6861
- forestry, research, conferences 775
- fungal diseases, *Ganoderma sculptrutum, Eucalyptus grandis,* provenance, susceptibility 9098
- insect pests, Isoptera 2308
- *Julbernardia globiflora,* savanna woodlands, biomass, estimation 6960
- mistletoes, *Tapinanthus vittatus, Diplorhynchus condylocarpon,* photosynthesis 4026
- *Pinus,* yield forecasting, simulation 6830
- *Pinus elliottii,* breeding programmes, progeny testing, selection criteria 7351
- *Pinus kesiya,* spacing, thinning, increment 6942
- *Pinus patula*
  - soil organic matter, forest litter, soil fertility 2812
  - tree breeding, progeny testing, genetics, heritability 557
- rain forests, aerial photography, deforestation 7002
- reclamation, mine spoil 7563
- reserved forests, nature conservation, increment, sample plot technique 6816
- savanna woodlands
  - soil organic matter, forest litter, soil fertility 2812
  - stand structure, disturbance, soil properties 8156
- savannas, synecology, land use 6549
- *Trichilia,* seed crops, rural economy 195
- tropical forests, reserved forests, bibliographies 7635
- vegetation, woody plants, maps, remote sensing, multispectral imagery 7846
- woodlands
  - forest management, indigenous knowledge, books 7627
  - synecology, land use 6549

Ziziphus loti, pollen, ontogeny 5381

Ziziphus mauritiana
- air pollution, foliage, damage, India 5328
- branching, habit, India 2037
- fuelwood, India, calorific value 3361
- parasitic plants, *Santalum album,* increment, India 186
- seed germination, seedling growth, soil chemistry, carbon, Zambia 5239
- street trees, air pollution, dust, damage, Pakistan 4550
- vegetation, reclamation, sodic soils, India 712

Ziziphus mistol, genetic variation, Argentina, flavonoids 420

Ziziphus rotundifolia, agroforestry, India 3274

Ziziphus spina-christi, vegetation types, synecology, soil properties, deserts, Saudi Arabia 8162

Zygia
- taxonomy
  - Central America, new species 8967
  - South America, new species 8967

Zygomycetes, root nodules, *Alnus glutinosa* 8278

Zygophyllum dumosum, plant water relations, stomatal resistance, abscisic acid, Israel 2083

LIST OF SERIALS ABSTRACTED

Listed below are the titles of the serial publications (excluding most annual reports and conference proceedings) abstracted during 1995 for this journal.

Many other serials were scanned during 1995 but no relevant articles were selected. A full list of all the serials scanned for items suitable for abstracting for the CAB ABSTRACTS database and the whole range of CABI's abstract journals is given in the *CAB International Serials Checklist, 1988 edition.* The publication includes ISSNs and publishers' addresses.

ABARE Research Report
Acarologia
ACIAR Technical Reports Series
ACLEP Newsletter
Acta Academiae Agriculturae ac Technicae Olstenensis, Agricultura
Acta Agriculturæ Scandinavica. Section B, Soil and Plant Science
Acta Agriculturae Boreali-Sinica
Acta Agriculturae Shanghai
Acta Agronómica - Universidad Nacional de Colombia
Acta Biológica Venezuelica
Acta Botanica Fennica
Acta Botanica Gallica
Acta Botánica Mexicana
Acta Botanica Neerlandica
Acta Botanica Yunnanica
Acta Científica Venezolana
Acta Dendrobiologica
Acta Entomologica Sinica
Acta Forestalia Fennica
Acta Horticulturae
Acta Mycologica Sinica
Acta Oecologica
Acta Pharmaceutica Sinica
Acta Physiologiae Plantarum
Acta Phytophysiologica Sinica
Acta Scientiarum Naturalium Universitatis Sunyatseni
Acta Societatis Botanicorum Poloniae
Acta Theriologica
Acta Tropica
Acta Universitatis Upsaliensis, Symbolae Botanicae Upsalienses
Acta Zoologica Bulgarica
Administrator
Advances in Ecological Research
Advances in Geoecology
Advances in Horticultural Science
African Affairs
African Crop Science Journal
African Entomology
African Journal of Ecology
African Journal of Range & Forage Science
AFZ, Allgemeine Forst Zeitschrift
AgBiotech News and Information
Agricultura em São Paulo
Agricultura, Revista Agropecuaria
Agricultural and Forest Meteorology
Agricultural Research Journal of Kerala
Agricultural Science in Finland
Agricultural Systems
Agricultural Water Management
Agriculture and Human Values
Agriculture et Développement
Agriculture, Ecosystems & Environment
Agrodok
Agroforestería en las Américas
Agroforestry Systems
Agroforestry Today
Agrokhimiya
Agronomie
Agropecuária Catarinense
Agrotecnia de Cuba
Air & Waste
Al'gologiya
Albertoa
Aliso
Allelopathy Journal
Allergy (Copenhagen)
Allgemeine Forst- und Jagdzeitung
Allionia
Alpe Adria Microbiology Journal
Amazoniana
Ambio
American Bee Journal
American Journal of Agricultural Economics
American Journal of Botany
American Journal of Enology and Viticulture
American Midland Naturalist
American Naturalist
Anais da Sociedade Entomológica do Brasil
Anales del Instituto de Biología. Serie Botánica
Anales del Jardín Botánico de Madrid
Angewandte Botanik
Animal Feed Science and Technology
Annalen Economische Wetenschappen - Koninklijk Museum voor Midden-Afrika
Annales Botanici Fennici
Annales de Gembloux
Annales de Recherches Sylvicoles, AFOCEL
Annales des Sciences Forestières
Annales Scientifiques de l'Université de Franche-Comté (Besançon), Biologie-Écologie
Annales Universitatis Mariae Curie-Skłodowska. Sectio C, Biologia
Annales Zoologici Fennici
Annali - Accademia Italiana di Scienze Forestali
Annali dell'Istituto Sperimentale per la Selvicoltura
Annali della Facoltà di Agraria dell'Università Sassari, Studi Sassaresi
Annali della Facoltà di Agraria, Università degli Studi di Perugia
Annali della Facoltà di Agraria, Università di Bari
Annali della Facoltà di Scienze Agrarie della Università degli Studi di Torino
Annals of Applied Biology
Annals of Arid Zone
Annals of Botany
Annals of Entomology
Annals of Forestry
Annals of Plant Protection Sciences
Annals of the Entomological Society of America
Annals of the Missouri Botanical Garden
Annals of the Phytopathological Society of Japan
Annual Review of Entomology
Annual Review of Phytopathology
Annual Review of Plant Physiology and Plant Molecular Biology
Antara Kita
Antenna (London)
Anzeiger für Schädlingskunde, Pflanzenschutz, Umweltschutz
APAN Field Document
APAN Report
APANews
Apiacta
Appita Journal
Applied Botany Abstracts
Applied Engineering in Agriculture
Applied Entomology and Zoology
Applied Geography (Sevenoaks)
Applied Plant Science
Aquatic Botany
Aquilo. Ser. Botanica
Arab Gulf Journal of Scientific Research
Arboretum Kórnickie
Arboricultural Journal
Archiv für Hydrobiologie
Archiv für Hydrobiologie, Supplementband, Algological Studies
Archives of Biochemistry and Biophysics
Archives of Environmental Contamination and Toxicology
Archives of Nature Conservation and Landscape Research
Archives of Phytopathology and Plant Protection
Arctic
Arctic and Alpine Research
Arid Soil Research and Rehabilitation
Asian-Australasian Journal of Animal Sciences
Aspects of Applied Biology
Atmospheric Environment
Aus dem Walde
Australian Entomologist
Australian Forestry
Australian Geographer
Australian Journal of Agricultural Economics
Australian Journal of Botany
Australian Journal of Ecology

Australian Journal of Experimental Agriculture
Australian Journal of Marine and Freshwater Research
Australian Journal of Plant Physiology
Australian Journal of Soil and Water Conservation
Australian Journal of Soil Research
Australian Systematic Botany
Austrobaileya
Bangladesh Journal of Forest Science
Banko Janakari
Behavioral Ecology and Sociobiology
Beiträge für Forstwirtschaft und Landschaftsökologie
Beiträge zur Entomologie
Beiträge zur Tropischen Landwirtschaft und Veterinärmedizin
Belarra
Berichte aus der Abteilung für Rechnungswesen und forstliche Marktlehre am Institut für forstliche Betriebswirtschaft und Forstwirtschaftspolitik, Universität für Bodenkultur, Wien
Berichte der Eidgenössische Forschungsanstalt für Wald, Schnee und Landschaft
Biblioteczka Wiadomości IMUZ
Biochemical Genetics
Biochemical Systematics and Ecology
Biochemie und Physiologie der Pflanzen
Biochemistry and Molecular Biology International
Biochimica et Biophysica Acta, Bioenergetics
Biochimica et Biophysica Acta, Gene Structure and Expression
Biocontrol Science and Technology
Biodiversity and Conservation
Biogeochemistry
Biológia (Bratislava)
Biologia Plantarum
Biological Conservation
Biological Control
Biological Journal of the Linnean Society
Biological Trace Element Research
Biology and Fertility of Soils
Biology Bulletin of the Russian Academy of Sciences
Biomass and Bioenergy
Biometrical Journal
Biometrics
Bioresource Technology
BioScience
Bioscience, Biotechnology and Biochemistry
Biotechnology Letters
BIOTROPIA
Biotropica
Bioved
Bois et Forêts des Tropiques
Boletim da Sociedade Broteriana
Boletim de Pesquisa - Centro de Pesquisa Agroflorestal da Amazonia Oriental
Boletín de Entomología Venezolana
Boletín de Investigación - Facultad de Agronomía, Universidad de la República, Uruguay
Boletín de la Sociedad Botánica de México
Boletín FDA
Bollettino del Laboratorio di Entomologia Agraria 'Filippo Silvestri'
Bollettino del Museo Civico di Storia Naturale di Venezia
Bollettino dell'Istituto di Entomologia 'Guido Grandi' della Università degli Studi di Bologna
BOS Nieuwsletter
Botanica Acta
Botanica Helvetica
Botanica Marina
Botanical Bulletin of Academia Sinica
Botanical Journal of Scotland
Botanical Journal of South China
Botanical Journal of the Linnean Society
Botanical Review
Botanicheskiĭ Zhurnal
Bothalia
Boundary-Layer Meteorology
Brittonia
Bujqësia Shqiptare
Buletin Penelitian Hutan
Buletinul Academiei de Ştiinţe a Republicii Moldova. Ştiinţe Biologice şi Chimice
Bulletin - Wood Anatomy Series, Bangladesh Forest Research Institute
Bulletin des Recherches Agronomiques de Gembloux
Bulletin du Jardin Botanique National de Belgique
Bulletin du Muséum National d'Histoire Naturelle. Section B, Adansonia
Bulletin OEPP
Bulletin of Entomological Research
Bulletin of Environmental Contamination and Toxicology
Bulletin of Faculty of Agriculture, University of Cairo
Bulletin of Marine Science
Bulletin of the Faculty of Agriculture, Kagoshima University
Bulletin of the Forestry and Forest Products Research Institute, Ibaraki
Bulletin of the Institute of Tropical Agriculture, Kyushu University
Bulletin of the Kyoto Prefectural University Forests
Bulletin of the Kyoto University Forests
Bulletin of the Kyushu University Forests
Bulletin of the Shinshu University Forests
Bulletin of the Tokyo University Forests
Bulletin of the Torrey Botanical Club
Bulletin of the University of Osaka Prefecture. Series B, Agriculture and Biology
Bulletin of the Utsunomiya University Forests
Bulletin OILB/SROP
Bulletin Technique - Office National des Forêts, France
Bunseki Kagaku = Journal of Japanese Society for Analytical Chemistry
Byulleten' Glavnogo Botanicheskogo Sada
Cahiers Agricultures
Cahiers d'Économie et Sociologie Rurales
Cahiers Options Méditerranéennes
California Agriculture
CALMScience
Canadian Entomologist
Canadian Field-Naturalist
Canadian Journal of Agricultural Economics
Canadian Journal of Botany
Canadian Journal of Development Studies
Canadian Journal of Fisheries and Aquatic Sciences
Canadian Journal of Forest Research
Canadian Journal of Microbiology
Canadian Journal of Plant Pathology
Canadian Journal of Plant Science
Canadian Journal of Soil Science
Canadian Journal of Zoology
Canopy International
Carbohydrate Polymers
Catena
Cathaya
CDR Working Papers
Cecidology
Cellulosa e Carta
Centralblatt für das Gesamte Forstwesen
Chemical and Pharmaceutical Bulletin
Chemistry and Industry of Forest Products
Chemistry of Natural Compounds
Chemoecology
Chemosphere
China Fruits
Chinese Journal of Applied Ecology
Chinese Journal of Arid Land Research
Chittagong University Studies, Science
Ciencia e Investigación Forestal
CIFOR Occasional Paper
Circular - Agricultural and Forestry Experiment Station, West Virginia University
Circular Farmacèutica
Climate Research
Climatic Change
Colección Información Técnica Agraria. Serie Agricultura, Spain
Coleopterists Bulletin
Combined Proceedings - International Plant Propagators' Society
Commonwealth Forestry Review
Communications in Soil Science and Plant Analysis
Community Development Journal
Comparative Studies in Society and History
Compendium of Canadian Forestry Statistics
Compost Science & Utilization
Comptes Rendus de l'Académie d'Agriculture de France
Comptes Rendus de l'Académie des Sciences. Série III, Sciences de la Vie
Computers and Electronics in Agriculture
Comunicaciones INIA. Série Recursos Naturales
Condor
Conservation Biology
Contact Dermatitis
Contributions from the Biological Laboratory, Kyoto University
Contributions from the University of Michigan Herbarium
Coolia
Countryside Recreation Network News
Crop Protection
Crop Research (Hisar)
Cryo-letters
Cryptogamie, Mycologie
CTBA Info
Culture & Agriculture
Current Bibliography on African Affairs
Current Genetics
Current History
Current Science
Cytobios
Cytologia
Czech Mycology
D + C, Development and Cooperation
Dansk Dendrologisk Årsskrift
Debate Agrario (Lima)
Dendrochronologia

Dendronatura
Deutsche Entomologische Zeitschrift
Development and Change
Development Policy Review
Development Southern Africa
DGF Informação
Dirasat. Series B, Pure and Applied Sciences
Discovery and Innovation
Documento Técnico, Chile Forestal
Doğa, Türk Tarım ve Ormancılık Dergisi
Doklady, Biological Sciences
Down to Earth
Duta Rimba
EANHS Bulletin
Earth Surface Processes and Landforms
East African Agricultural and Forestry Journal
Ecography
Ecología (Madrid)
Ecological Applications
Ecological Bulletins
Ecological Economics (Amsterdam)
Ecological Entomology
Ecological Modelling
Ecological Monographs
Ecological Research
Écologie
Ecologist
Ecology
Ecology of Food and Nutrition
Economic and Political Weekly
Economic Botany
Economie et Sociologie Rurales (Toulouse)
Écoscience
Ecotoxicology and Environmental Safety
Eesti Teaduste Akadeemia Toimetised, Bioloogia
Ekológia (Bratislava)
Energia na Agricultura
Entomologia Experimentalis et Applicata
Entomologia Generalis
Entomological Knowledge
Entomological News
Ėntomologicheskoe Obozrenie
Entomologische Nachrichten und Berichte
Entomologisk Tidskrift
Entomologist's Monthly Magazine
Entomon
Entomophaga
Environment and Ecology
Environment and History
Environmental and Experimental Botany
Environmental and Resource Economics
Environmental Conservation
Environmental Entomology
Environmental Geochemistry and Health
Environmental Management
Environmental Monitoring and Assessment
Environmental Pollution
Environmental Science & Technology
Environmental Science and Pollution Research International
Environmental Technology
Environmental Toxicology and Chemistry
Environmentalist
Ernstia
Estuaries
Estuarine, Coastal & Shelf Science
Euphytica
Eurasian Soil Science
European Journal of Entomology
European Journal of Forest Pathology
European Journal of Plant Pathology
European Journal of Soil Biology
European Journal of Soil Science
Evergreen (Trichur)
Evolution
Experientia
Extension Bulletin - ASPAC, Food & Fertilizer Technology Center
Extension Bulletin - Cooperative Extension, College of Agriculture & Home Economics, Washington State University
FAO Community Forestry Note
FAO Forestry Paper
Fauna Norvegica. Serie B, Norwegian Journal of Entomology
FBVA Berichte
Feddes Repertorium
FEMS Microbiology Ecology
Fertilizer Research
Fett Wissenschaft Technologie
Field Note: General - Forest Engineering Research Institute of Canada
Field note: Processing - Forest Engineering Research Institute of Canada
Field Note: Silviculture - Forest Engineering Research Institute of Canada
Fieldiana, Botany
Finance & Development
Fitopatologia Brasileira
Fitopatología Venezolana
Fitoterapia
Flamboyant
Flavour and Fragrance Journal
Flora (Jena)
Florida Entomologist
Folia Forestalia
Folia Forestalia Polonica. Seria A, Leśnictwo
Folia Geobotanica et Phytotaxonomica
Folia Zoologica
Food Chemistry
Förderungsdienst
Forest & Landscape Research
Forest Ecology and Management
Forest Genetic Resources
Forest Genetics
Forest Inventory Report - Kenya Indigenous Forest Conservation Programme
Forest Products Industries
Forest Products Journal
Forest Research
Forest Science
Forest Science and Technology of Shandong
Forestry & British Timber
Forestry (Oxford)
Forestry Chronicle
Forestry Commission Bulletin
Forestry Publications - Ministry of Agriculture, Water and Rural Development, Directorate of Forestry, Namibia
Forestry Research Publication - Agricultural Research and Extension Authority, Malaysia
Forêt Privée
Forêt-Entreprise
Forêts de France
Forschungsberichte - Hessische Forstliche Versuchsanstalt
Forskningsserien - Danish Forest and Landscape Research Institute
FORSPA Publication
Forst und Holz
Forstarchiv
Forstliche Forschungsberichte München
Forstschutz Aktuell
Forsttechnische Informationen
Forstwissenschaftliche Beitrage - ETH Zurich
Forstwissenschaftliches Centralblatt
Fragmenta Floristica et Geobotanica
FRD Occasional Paper - Forest Research Division, Nepal
FRDA Report (Victoria, B.C.)
Fresenius Environmental Bulletin
Fresenius' Journal of Analytical Chemistry
Freshwater Biology
FRI Bulletin
FRIM Newsletter (Forestry Research Institute of Malawi)
Frontiers of Plant Science
FRSC Occasional Paper
Functional Ecology
Gamma Field Symposia
Garcia de Orta. Série de Botânica
Garden (London)
Gardens' Bulletin (Singapore)
GardenWise
Gartenamt
Gartenbau Magazin
Gartenbauwissenschaft
Gene
General Technical Report - Intermountain Research Station, USDA Forest Service
General Technical Report - Pacific Southwest Research Station, USDA Forest Service
General Technical Report - Rocky Mountain Forest and Range Experiment Station, USDA Forest Service
General Technical Report - Southeastern Forest Experiment Station, USDA Forest Service
General Technical Report - Southern Forest Experiment Station, USDA Forest Service
General Technical Report - USDA Forest Service
Genetic Resources and Crop Evolution
Genetica
Genetica Polonica
Genetical Research
Genetics
Genetics, Selection, Evolution
Genetika (Moskva)
Genio Rurale
Genome
Geo-Eco-Trop
Geoderma
Geografiska Annaler. Series A, Physical Geography
Geographia Polonica

Geographische Rundschau
Geojournal
Geomicrobiology Journal
Georgofili
Gesunde Pflanzen
Ghana Journal of Forestry
Glasnik za Šumske Pokuse
Global and Planetary Change
Global Ecology and Biogeography Letters
Göttinger Beiträge zur Land- und Forstwirtschaft in den Tropen und Subtropen
Gozdarski Vestnik
Grana
Great Basin Naturalist
Great Lakes Entomologist
Hamdard Medicus
Hereditas (Landskrona)
Heredity
Hinkeloord Reports
Hojas Divulgadoras - Ministerio de Agricultura, Pesca y Alimentación, Spain
Holz als Roh- und Werkstoff
Holzforschung
Holzforschung und Holzverwertung
Horticulture in New Zealand
Horticulturist
HortScience
HortTechnology
HRC, Journal of High Resolution Chromatography
Human Ecology (New York)
Human Organization
Hydrobiologia
Hydrological Processes
Hydrological Sciences Journal
IAWA Journal
ICFR Bulletin Series
ICFR Newsletter
ICRAF Working Paper
IDS Bulletin
IEEE Transactions on Geoscience and Remote Sensing
IFONA Reporter
Iheringia, Série Botânica
In Vitro Cellular & Developmental Biology - Plant
INBAR Newsletter
INBAR Technical Report
Indian Agriculturist
Indian Farming
Indian Forester
Indian Geographical Journal
Indian Journal of Agricultural Research
Indian Journal of Agricultural Sciences
Indian Journal of Agronomy
Indian Journal of Dairy Science
Indian Journal of Environmental Health
Indian Journal of Experimental Biology
Indian Journal of Forestry
Indian Journal of Genetics & Plant Breeding
Indian Journal of Hill Farming
Indian Journal of Marine Sciences
Indian Journal of Microbiology
Indian Journal of Mycology and Plant Pathology
Indian Journal of Regional Science
Indian Journal of Sericulture
Indian Phytopathology
Indigenous Knowledge & Development Monitor
Industrial Crops and Products
Information Leaflet - Quebec Region, Canadian Forest Service
Information Report ST-X, Canadian Forest Service
Informations-Forêt, AFOCEL-ARMEF
Informatore Agrario
Informatore Fitopatologico
Informe Agropecuário (Belo Horizonte)
Informe de Investigación - Monterrey Forestal Ltda
Informe Técnico - Instituto Forestal (Chile)
Insect Knowledge
Intereconomics
International Archives of Allergy and Immunology
International Journal of Biometeorology
International Journal of Climatology
International Journal of Environmental Analytical Chemistry
International Journal of Environmental Studies
International Journal of Food Sciences and Nutrition
International Journal of Pest Management
International Journal of Pharmacognosy
International Journal of Plant Sciences
International Journal of Remote Sensing
International Journal of Sustainable Development and World Ecology
International Journal of Systematic Bacteriology
International Journal of Tropical Plant Diseases
International Journal of Wildland Fire
International Tree Crops Journal
Investigación Agraria, Sistemas y Recursos Forestales
IRDCurrents
Israel Journal of Botany
Israel Journal of Plant Sciences
Italia Forestale e Montana
ITC Journal
IUFRO World Series
Izvestiya Akademii Nauk Azerbaĭdzhanskoĭ SSR, Biologicheskie Nauki
Izvestiya Vysshikh Uchebnykh Zavedeniĭ, Lesnoĭ Zhurnal
Japanese Journal of Applied Entomology and Zoology
Japanese Journal of Breeding
Japanese Journal of Ecology
Japanese Journal of Entomology
Japanese Journal of Genetics
Japanese Journal of Soil Science and Plant Nutrition
Japanese Journal of Tropical Agriculture
JARQ, Japan Agricultural Research Quarterly
JIRCAS International Symposium Series
Journal für Entwicklungspolitik
Journal of African Zoology
Journal of Agricultural and Applied Economics
Journal of Agricultural and Food Chemistry
Journal of Agricultural Economics
Journal of Agricultural Science
Journal of Agricultural Science, Tokyo Nogyo Daigaku
Journal of Agriculture, Western Australia
Journal of Animal Ecology
Journal of Applied Bacteriology
Journal of Applied Ecology
Journal of Applied Entomology
Journal of Applied Ichthyology
Journal of Applied Meteorology
Journal of Arboriculture
Journal of Arid Environments
Journal of Basic Microbiology
Journal of Biogeography
Journal of Biological Chemistry
Journal of Biological Education
Journal of Biosciences
Journal of Cell Science
Journal of Chemical Ecology
Journal of Chromatography
Journal of Coastal Research
Journal of Contemporary Asia
Journal of Dairy Science
Journal of Developing Areas
Journal of Ecology (Oxford)
Journal of Economic and Taxonomic Botany
Journal of Economic Entomology
Journal of Entomological Science
Journal of Entomological Society of Iran
Journal of Environmental Biology
Journal of Environmental Economics and Management
Journal of Environmental Horticulture
Journal of Environmental Management
Journal of Environmental Quality
Journal of Environmental Radioactivity
Journal of Environmental Science and Health. Part A, Environmental Science and Engineering
Journal of Environmental Science and Health. Part B, Pesticides, Food Contaminants, and Agricultural Wastes
Journal of Environmental Sciences
Journal of Essential Oil Research
Journal of Ethnopharmacology
Journal of Evolutionary Biology
Journal of Experimental Botany
Journal of Field Ornithology
Journal of Food Composition and Analysis
Journal of Forest Economics
Journal of Forestry
Journal of Freshwater Ecology
Journal of Fruit Science
Journal of Fujian College of Forestry
Journal of General Virology
Journal of Genetics & Breeding
Journal of Herbs, Spices & Medicinal Plants
Journal of Heredity
Journal of Horticultural Science
Journal of Hydrology (Amsterdam)
Journal of Hydrology, New Zealand
Journal of Industrial Microbiology
Journal of Insect Behavior
Journal of Investigational Allergology & Clinical Immunology
Journal of Irrigation and Drainage Engineering
Journal of Irrigation Engineering and Rural Planning
Journal of Japan Society of Air Pollution
Journal of Japanese Botany
Journal of Jilin Agricultural University
Journal of King Saud University, Agricultural Sciences
Journal of Korean Applied Ecology
Journal of Liquid Chromatography

Journal of Living World
Journal of Maharashtra Agricultural Universities
Journal of Mammalogy
Journal of Natural Products
Journal of Pharmacy and Pharmacology
Journal of Phytopathology
Journal of Plant Growth Regulation
Journal of Plant Nutrition
Journal of Plant Physiology
Journal of Plant Resources and Environment
Journal of Range Management
Journal of Shenyang Agricultural University
Journal of Soil and Water Conservation
Journal of South China Agricultural University
Journal of Southwest Agricultural University
Journal of Sustainable Agriculture
Journal of the Adelaide Botanic Gardens
Journal of the Air & Waste Management Association
Journal of the American Oil Chemists' Society
Journal of the American Society for Horticultural Science
Journal of the Australian Entomological Society
Journal of the Bombay Natural History Society
Journal of the Faculty of Agriculture, Kyushu University
Journal of the Indian Academy of Wood Science
Journal of the Indian Society of Soil Science
Journal of the Institute of Wood Science
Journal of the Japanese Forestry Society
Journal of the Kansas Entomological Society
Journal of the Lepidopterists' Society
Journal of the National Science Council of Sri Lanka
Journal of the Royal Agricultural Society of England
Journal of the Royal Society of New Zealand
Journal of the Science of Food and Agriculture
Journal of the Southern African Society for Horticultural Sciences
Journal of Theoretical Biology
Journal of Tropical Agriculture
Journal of Tropical Ecology
Journal of Tropical Forest Science
Journal of Turfgrass Management
Journal of Vegetation Science
Journal of Wildlife Management
Journal of World Forest Resource Management
Jugoslovensko Voćarstvo
Jurnal Penelitian dan Pengembangan Kehutanan
Jurnal Penelitian Hasil Hutan
Karnataka Journal of Agricultural Sciences
Kasetsart Journal, Natural Sciences
Kew Bulletin
KFRI Information Bulletin
Kieler Arbeitspapiere
Kieler Studien - Institut für Weltwirtschaft an der Universität Kiel
Kirkia
Klinkii
Korean Journal of Applied Entomology
Kungl. Skogs- och Lantbruksakademiens Tidskrift
La Vie des Sciences
Land Degradation & Rehabilitation
Land Economics
Land Use Policy
Landbruksøkonomisk Forum
Landscape and Urban Planning
Landscape Ecology
Leisure Manager
Lesnaya Promyshlennost'
Lesnoe Khozyaĭstvo
Lesokhozyaĭstvennaya Informatsiya
Lesovedenie
Letters in Applied Microbiology
Louisiana Agriculture
Lucrări Ştiinţifice, Institutul Agronomic 'Nicolae Bălcescu', Bucureşti, Seria B, Horticultură
MAB Digest
Madera y Su Uso
Madroño
Mammal Review
Mammalia
Management Bulletin - Southern Region, USDA Forest Service
Marine Pollution Bulletin
Medecine Traditionnelle et Pharmacopee
Mededelingen van de Faculteit Landbouwwetenschappen, Universiteit Gent
Medit
Memoranda Societatis pro Fauna et Flora Fennica
Metsänjalostussäätion Tiedonantoja
Metsätehon Tiedotus
Microbial Ecology in Health and Disease
Microbiological Research
Microbiology (New York)
Mikologiya i Fitopatologiya
Miscellaneous Publication - USDA Forest Service
Mitteilungen aus der Forstlichen Versuchsanstalt Rheinland-Pfalz
Mitteilungen aus der Staatsforstverwaltung Bayerns
Mitteilungen aus der Waldwachstumsforschung in München
Mitteilungen der Bundesforschungsanstalt für Forst- und Holzwirtschaft, Hamburg
Mitteilungen der Deutschen Bodenkundlichen Gesellschaft
Mitteilungen der Deutschen Gesellschaft für Allgemeine und Angewandte Entomologie
Mitteilungen der Eidgenössischen Forschungsanstalt für Wald, Schnee und Landschaft
Mitteilungen der Forstlichen Versuchs- und Forschungsanstalt Baden-Württemberg
Mitteilungen des Vereins für Forstliche Standortskunde und Forstpflanzenzüchtung
Mokuzai Gakkaishi = Journal of the Japan Wood Research Society
Molecular and General Genetics
Molecular Breeding
Molecular Ecology
Molecular Plant-Microbe Interactions
Monti e Boschi
Moscow University Soil Science Bulletin
Mountain Research and Development
Multipurpose Tree Species Network Research Series: Report
Mycologia
Mycological Research
Mycologist
Mycorrhiza
Mycoscience
Mycotaxon
Myforest
Nachrichtenblatt des Deutschen Pflanzenschutzdienstes
Natural Enemies of Insects
Natural Resources and Environmental Issues
Nature (London)
Naturwissenschaften
Nederlands Bosbouwtijdschrift
Netherlands Journal of Agricultural Science
Network Paper - Rural Development Forestry Network
New Botanist
New Forests
New Phytologist
New Plantsman
New Zealand Forestry
New Zealand Journal of Agricultural Research
New Zealand Journal of Botany
New Zealand Journal of Crop and Horticultural Science
New Zealand Journal of Ecology
New Zealand Journal of Forestry Science
New Zealand Tree Grower
News of Forest History
NFT Highlights
Nitrogen Fixing Tree Research Reports
Nomadic Peoples
Nordic Hydrology
Nordic Journal of Botany
Norsk Landbruksforsking
Northern Journal of Applied Forestry
Northwest Science
Norwegian Journal of Agricultural Sciences
NOT Forestal
Notas del Centro Productor de Semillas de Arboles Forestales
Note de Informazione sulla Ricerca Forestale
Nouvelle Revue d'Entomologie
Nova Hedwigia
Növényvédelem
Novon
NRI Socio-economic Series
Nuytsia
Occasional Papers from SUM
Ochrona Roślin
ODA Forestry Series
Oecologia
Oikos
Orchardist of New Zealand
Oriental Insects
Ornis Fennica
ORSTOM Actualités
Oryx
Outlook on Agriculture
Oxford Economic Papers
Pacific Affairs
Pacific Science
Pakistan Journal of Forestry
Pakistan Journal of Phytopathology
Pakistan Journal of Scientific and Industrial Research
Pan-Pacific Entomologist
Parasitica
Pastos y Forrajes
Pasturas Tropicales
PCARRD Monitor
PE&RS, Photogrammetric Engineering & Remote Sensing
Pedobiologia

Pedosphere
Perez - Arbelaezia
Periodicum Biologorum
Pertanika Journal of Tropical Agricultural Science
Pesquisa Agropecuária Brasileira
Pest Leaflet - Pacific Forest Centre Forestry, Canada
Pesticide Science
Petria
Pflanzenschutzmittel - Verzeichnis. Teil 4, Forst
Pharmazie
Philippine Journal of Science
Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences
Photosynthesis Research
Photosynthetica
Physiologia Plantarum
Physiological and Molecular Plant Pathology
Phytochemistry
Phytocoenologia
Phytoma
Phytomorphology
Phyton (Buenos Aires)
Phyton (Horn)
Phytoparasitica
Phytopathologia Mediterranea
Phytopathology
Phytotherapy Research
Pirineos
Plant and Cell Physiology
Plant and Soil
Plant Breeding Reviews
Plant Cell
Plant Cell Reports
Plant Cell, Tissue and Organ Culture
Plant Disease
Plant Genetic Resources Newsletter
Plant Growth Regulation
Plant Journal
Plant Molecular Biology
Plant Molecular Biology Reporter
Plant Pathology
Plant Physiology
Plant Physiology and Biochemistry (Paris)
Plant Protection
Plant Protection Quarterly
Plant Science (Limerick)
Plant Systematics and Evolution
Plant, Cell and Environment
Planta
Planta Medica
Planter
Plantes Médicinales et Phytothérapie
Polish Botanical Studies
Politique Africaine
Power Farming (Melbourne)
Prace Instytutu Badawczego Leśnictwa
Prace Instytutu Technologii Drewna
Prace z Zakresu Nauk Leśnych
Probleme de Genetică Teoretică şi Aplicată
Proceedings of the Entomological Society of Manitoba
Proceedings of the Indian National Science Academy. Part B, Biological Sciences
Proceedings of the Interamerican Society for Tropical Horticulture
Proceedings of the Koninklijke Nederlands Akademie van Wetenschappen. Biological, Chemical, Geological, Physical and Medical Sciences
Proceedings of the National Academy of Sciences of the United States of America
Proceedings of the Royal Society of London. Series B, Biological Sciences
Proceedings of the Royal Society of Queensland
Progress in Botany
Progress in Physical Geography
Progress in Rural Policy and Planning
Project Report - New Zealand Logging Industry Research Organisation
Protoplasma
Quarterly Journal of Forestry
Quarterly Journal of International Agriculture
Rangeland Journal
RAPA Publication
Rapport - Institutionen för Ekologi och Miljövård, Sveriges Lantbruksuniversitet
Rapport - Institutionen för Skoglig Genetik och Växtfysiologi, Sveriges Lantbruksuniversitet
Rapport - Institutionen för Skoglig Landskapsvård, Sveriges Lantbruksuniversitet
Rapport - Institutionen för Skogsproduktion, Sveriges Lantbruksuniversitet
Rapport - Institutionen för Skogstaxering, Sveriges Lantbruksuniversitet
Rapport fra Skogforsk
Rapporter i Skogsekologi och Skoglig Marklärat
Rapporter och Uppsatser - Institutionen för Skogsgenetik, Sveriges Lantbruksuniversitet
Rastitel'nye Resursy
Record - Faculty of Forestry, Sokoine University of Agriculture
Redia
Redogörelse - SkogForsk
Remote Sensing of Environment
Report - Laboratory of Space Technology, Helsinki University of Technology
Report - New Zealand Logging Industry Research Organisation
Report - Remote Sensing Laboratory, Swedish University of Agricultural Sciences
Report - SkogForsk
Reporte Científico - Facultad de Ciencias Forestales, Universidad Autónoma de Nuevo León
Research & Exploration
Research & Training Newsletter (Dar es Salaam)
Research Bulletin of the Faculty of Agriculture, Gifu University
Research Bulletin of the Hokkaido University Forests
Research Bulletin of the Institute of Forest Science, Kangwon National University
Research Bulletin of the Niigata University Forests
Research Information Note - Forestry Authority Research Division, UK
Research Journal of Food and Agriculture
Research Note - Department of Primary Industries, Forest Service, Queensland
Research Note - Southeastern Forest Experiment Station, USDA Forest Service
Research Note - Southern Forest Experiment Station, USDA Forest Service
Research Notes - Faculty of Forestry, University of Joensuu
Research Paper - Department of Primary Industries, Forest Service, Queensland
Research Paper - Forestry Commission of New South Wales
Research Paper - Southeastern Forest Experiment Station, USDA Forest Service
Research Paper - Southern Forest Experiment Station, USDA Forest Service
Research Paper - State Forests of New South Wales
Research Paper - Zimbabwe Forestry Commission
Research Report of the Forest Genetics Research Institute
Research Reports of the Forestry Research Institute (Seoul)
Researches on Population Ecology
Resource Bulletin - North Central Forest Experiment Station, USDA Forest Service
Restoration Ecology
Resultat - SkogForsk
Results - Forskningsstiftelsen Skogsarbeten
Review of Palaeobotany and Palynology
Revista Baracoa
Revista Brasileira de Genética
Revista Brasileira de Sementes
Revista Brasileira de Zoologia
Revista Ceres
Revista Chapingo. Serie Horticultura
Revista de Agricultura (Piracicaba)
Revista de Estudios Agro-Sociales
Revista de la Academia Colombiana de Ciencias Exactas, Físcias y Naturales
Revista de la Facultad de Agronomía (La Plata)
Revista de la Facultad de Agronomía, Universidad del Zulia
Revista do Instituto de Medicina Tropical de São Paulo
Revista Forestal - Carrera de Ingeniera Forestal, Facultad de Ingeniería Agronomica, Universidad Nacional de Asunción
Revista Forestal del Perú
Revista Forestal Venezolana
Revista Pădurilor
Revista UNIMAR
Revue d'Ecologie (la Terre et la Vie)
Revue d'Élevage et de Médecine Vétérinaire des Pays Tropicaux
Revue Forestière Française
Rhodora
RIC Bulletin
Rivista di Agricoltura Subtropicale e Tropicale
Rivista di Economia Agraria
Roczniki Akademii Rolniczej w Poznaniu, Leśnictwo
Roczniki Gleboznawcze
Russian Agricultural Sciences
Russian Journal of Ecology
Russian Journal of Nematology
Russian Journal of Plant Physiology
Samfundsvidenskabelig Memo-Serie - Institut for Økonomi, Skov og Landskab
Sandakania
Santalum
Sarawak Gazette
Sarhad Journal of Agriculture
Scandinavian Forest Economics
Scandinavian Journal of Forest Research
Schriften aus der Forstlichen Fakultät der Universität Göttingen und der Niedersächsischen Forstlichen Versuchsanstalt

Schriftenreihe des Bundesministeriums für Ernährung, Landwirtschaft und Forsten. Reihe A, Angewandte Wissenschaft
Schweizerische Zeitschrift für Forstwesen
Science (Washington)
Science Bulletin of the Faculty of Agriculture, Kyushu University
Science of the Total Environment
Science Reports of Faculty of Agriculture, Kobe University
Scientia Agricola
Scientia Horticulturae
Scientific Reports of the Kyoto Prefectural University, Agriculture
Scientific Reports of the Miyagi Agricultural College
Scottish Forestry
Sécheresse
Seed Science and Technology
Seed Science Research
Serie Documentación - Corporación Nacional de Investigación y Fomento Forestal
Sexual Plant Reproduction
Sheep Research Journal
Shizenshi-kenkyu
Sibirskiĭ Biologicheskiĭ Zhurnal
Silva Belgica
Silva Fennica
Silva Gandavensis
Silva Lusitana
Silvae Genetica
Silvoenergía
Sinet, an Ethiopian Journal of Science
Skog&Forskning
Small Ruminant Research
Social Action (New Delhi)
Society & Natural Resources
Sociologia Ruralis
Soil & Tillage Research
Soil Biology & Biochemistry
Soil Science
Soil Science Society of America Journal
Soil Technology
Soil Use and Management
South African Bee Journal
South African Forestry Journal
South African Journal of Botany
South African Journal of Marine Science
South African Journal of Plant and Soil
South African Journal of Science
South African Journal of Wildlife Research
South African Journal of Zoology
South Indian Horticulture
Southern Journal of Applied Forestry
Southwestern Naturalist
SP Rapport - Statens Planteavlsforsog
Special Publication - Agronomy Society of New Zealand
Special Report - Forest Engineering Research Institute of Canada
Sri Lanka Forester
Studia Forestalia Suecica
Studia Oecologica
Studies of the San'in Region, Forest Resources, Center for Studies of the San'in Region, Shimane University
Studies on Neotropical Fauna and Environment
Šumarski List
Summa Phytopathologica
Suo
Sustainable Development (Bradford)
Svensk Botanisk Tidskrift
Sydowia
Sylwan
Symbiosis (Rehovot)
Systematic and Applied Microbiology
Systematic Botany
Systematic Entomology
Taiwania
Tappi Journal
Tasmanian NRCP Report
Taxon
TDRI Quarterly Review
Technical Bulletin - Forests & Forestry, Asia Technical Department, World Bank
Technical Bulletin - Mississippi Agricultural and Forestry Experiment Station
Technical Bulletin - Native Forest Silviculture, Forestry Commission, Tasmania
Technical Bulletin of Faculty of Horticulture, Chiba University
Technical Memorandum - Division of Water Resources, Institute of Natural Resources and Environment, CSIRO
Technical Note - Forest Engineering Research Institute of Canada
Technical Paper - Forestry Commission, UK
Technical Paper - Forestry Commission of NSW
Technical Report Series - Department of Agriculture, Victoria
Technical Series: Centro Agronómico Tropical de Investigación y Enseñanza
Telopea
Terra Arida
Terra e Sole
Tetrahedron Letters
Texas Journal of Science
TFAP Update
Thai Forest Bulletin (Botany)
Thaiszia
Theoretical and Applied Genetics
Tiers Monde
Tigerpaper
Tokyo Noko Daigaku Nogakuba Enshurin Hokoku = Bulletin of the Experiment Forests, Tokyo University of Agriculture and Technology
Toxicological and Environmental Chemistry
Transactions of the ASAE
Tree Physiology
Tree Planters' Notes
Trees and Natural Resources
Trees: Structure and Function
Trends in Ecology & Evolution
Tropical Agriculture
Tropical Ecology
Tropical Forestry
Tropical Grasslands
Tropical Lepidoptera
Tropical Resource Management Papers
Tsitologiya
Tuexenia
Turrialba
Työtehoseuran Metsätiedote
Unasylva (English ed.)
Uppsatser och Resultat - Institutionen för Skogsteknik, Sveriges Lantbruksuniversitet
Uzbekskiĭ Biologicheskiĭ Zhurnal
Van Vigyan
Vaniki Sandesh
Vegetatio
Vestnik Leningradskogo Universiteta. Seriya 3, Biologiya
Vestnik Sel'skokhozyaĭstvennoĭ Nauki (Moskva)
Vestsī Akadėmiī Navuk Belarusi. Seryya Bīyalagīchnykh Navuk
Vie et Milieu
Vietnam Agroforestry
VTT Tiedotteita
Waldhygiene
Wallaceana
Water International
Water Research (Oxford)
Water Resources Bulletin
Water Resources Research
Water Science and Technology
Water, Air, and Soil Pollution
Weather
Weed Technology
Weltwirtschaftliches Archiv
Western Journal of Applied Forestry
Wetlands
WIDER Working Papers
Wildlife Biology
Wildlife Research
Wildlife Society Bulletin
Wilson Bulletin
Wissenschaftliche Zeitschrift der Humboldt-Universität zu Berlin. Reihe Mathematisch/Naturwissenschaftliche
Wood and Fiber Science
Wood Industry (Beijing)
Wood Research
Wood Science and Technology
Working Paper - Christian Michelsen Institute
Working Paper - Environment and Policy Institute, East-West Centre, Honolulu
Working Paper - International Rural Development Centre, Swedish University of Agricultural Sciences
World Bank Economic Review
World Bank Technical Paper
World Development (Oxford)
World Journal of Microbiology & Biotechnology
Zahradnictví
Zashchita Rasteniĭ (Moskva)
Zaštita Bilja
Zbornik Gozdarstva in Lesarstva, Ljubljana
Zeitschrift für Jagdwissenschaft
Zeitschrift für Kulturtechnik und Landentwicklung
Zeitschrift für Naturforschung. Section C, Biosciences
Zeitschrift für Pflanzenernährung und Bodenkunde
Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz
Zeszyty Problemowe Postępów Nauk Rolniczych
Zimbabwe Journal of Agricultural Research
Zoological Research
Zoologicheskiĭ Zhurnal
Zoölogische Jahrbucher. Abteilung für Systematik, Ökologie und Geographie der Tiere
Zoologischer Anzeiger

INFORMATION SERVICES AND PUBLICATIONS

Over 100 scientists/linguists in CABI's Information Services at Wallingford, UK, with help from associated organizations and individuals worldwide, abstract and index the significant research and development literature in agriculture, forestry, aspects of human health, and allied disciplines. Over 12,000 serials and many other publications are scanned, and over 160,000 bibliographic records are compiled each year for input to CABI's main databases, CAB ABSTRACTS and CAB HEALTH. In addition, a current awareness service, CABAccess, provides fast, unrivalled access to the key literature in agriculture and bioscience.

Both CAB ABSTRACTS and CAB HEALTH are available online, and a wide range of information products are derived from them.

ABSTRACT JOURNALS

Printed journals covering broad disciplines as well as specialist interests. Some journals also contain news and other information including review articles. Also available on floppy disk.

CD-ROM

CAB ABSTRACTS on Compact Disc, the CABCD, available back to 1973.

CAB HEALTH - available back to 1973.

CAB SPECTRUM – 10 subject-specific discs containing at least 20 years of information on each of the major disciplines.

CAB COLLECTION – titles combining data from CAB ABSTRACTS with complementary information from other sources.

MAGNETIC TAPES

Organizations with access to mini or mainframe computers may lease all or part of the CAB ABSTRACTS database.

CAB PROFILES

Personalized current awareness profiles based on the most recent input to the database, tailored to individual needs.

ANNOTATED BIBLIOGRAPHIES

Printed or electronic compilations on specific topics.

CAB ALERTS

A monthly current awareness service providing subscribers with the search results from standard profiles.

DOCUMENT DELIVERY SERVICE

Photocopies of originals of most articles included in the database are available from CABI Library Services, Silwood Park, Ascot, UK.

In addition to database products, CABI publishes authoritative reference books, directories, primary journals and serial publications.

PRIMARY JOURNALS

Bulletin of Entomological Research, Seed Science Research, Journal of Helminthology, Soil Use and Management, Outlook on Agriculture and *Meat Focus International.*

NEWSLETTERS

Authoritative, accurate and up-to-date synopses of current topics reflected in the international media as well as the technical, scientific and medical press.

SERIAL PUBLICATIONS

Index of Current Research on Pigs, Distribution Maps of Pests, Distribution Maps of Plant Diseases, Bibliography of Systematic Mycology, Descriptions of Pathogenic Fungi & Bacteria, Index of Fungi, and *Systema Ascomycetum.*

BOOKS

CABI has an active book publishing programme and publishes over 60 new titles every year. Some of which are available in electronic form.

Scientific software and reference tools

ANI-CD - An authority file containing approximately 100,000 anthropod names with preferred terms, synonyms, common names, taxonomic positions and bibliographic references.

CABIKEY - An interactive diagnostic key for the identification of insects and other organisms. The first CABIKEY application covers major beetle families.

For further information, contact:

CAB INTERNATIONAL

Headquarters
Wallingford
Oxon OX10 8DE
UK
Tel: (01491) 832111
Telex: 847964 (COMAGG G)
Fax: (01491) 833508

North America
845 North Park Avenue
Tucson, Arizona 85719
USA
Tel: (800) 528 4841
(602) 621 7897
Fax: (602) 621 3816

Asia
PO Box 11872
50760 Kuala Lumpur
Malaysia
Tel: (03) 255 2922
Telex: 28031 (MA CABI)
Fax: (03) 255 1888

Caribbean
Gordon Street
Curepe
Trinidad and Tobago
Tel: (809) 662 4173
Telex: 0294 24438 (CARIRI)
Fax: (809) 663 2859

Printed by Unwin Brothers Ltd., The Gresham Press, Old Woking, Surrey, U.K.
A Member of the Martins Printing Group

IBC-01
RPP
BSM

CAB INTERNATIONAL
Wallingford, Oxon OX10 8DE, UK
Tel: (01491) 832111; Fax: (01491) 833508

THE ORGANIZATION

CAB INTERNATIONAL (CABI) is an international, inter-governmental organization established in 1928. It is owned by its member governments, which currently number 36. The organization is largely self-supporting financially, through the sale of its products and services, and other sources of income.

CABI is dedicated to improving human welfare worldwide through the dissemination, application and generation of scientific knowledge in support of sustainable development, with emphasis on agriculture, forestry, human health and the management of natural resources, and with particular attention to the needs of developing countries.

INFORMATION SERVICES

Scientific and technical information services are provided, derived principally from bibliographic databases built by CABI staff from the world's relevant published literature, with assistance from freelance workers and contracted organizations.

CABI's main databases, CAB ABSTRACTS and CAB HEALTH cover:

agriculture - forestry and forest products - field crops - grasslands - horticulture - crop protection - plant and animal breeding - veterinary science - leisure, recreation and tourism - rural sociology and development - environmental sciences - soils, land and water management - biotechnology - human and animal nutrition - human and animal parasitology - public health - communicable diseases - AIDS - tropical diseases - community health.

Outputs from these databases are distributed in printed form, and in electronic form on diskette, CD-ROM (compact disc) and magnetic tape. Online access is provided by commercial database vendors. These products and services are used by research scientists, teachers and students in higher education, development planners, health workers, and other professionals. Copies of source documents are available through CABI's Document Delivery Service.

CABI also publishes books, primary journals, newsletters and training manuals.

Research and development is undertaken in innovative information systems. Training in information management is offered, especially for developing countries. Advice and practical assistance are given in the design and implementation of science-based information systems, and in the use of modern information technology. Where necessary, partnerships with development assistance agencies are sought to help developing countries acquire the products and services they need.

For further details of all CABI's information products and services see inside back cover.

SCIENTIFIC SERVICES

CABI's scientific services are centred on its four Institutes.

International Institute of Entomology
56 Queen's Gate, London, SW7 5JR, UK, and in the Natural History Museum
International Institute of Parasitology
395a Hatfield Road, St Albans, Herts AL4 OXU, UK
International Mycological Institute
Bakeham Lane, Egham, Surrey TW20 9TY, UK
International Institute of Biological Control
Silwood Park, Buckhurst Road, Ascot, Berks SL5 7TA, UK, with field stations in Trinidad & Tobago, Switzerland, Pakistan, Malaysia and Kenya.

The services provided include:

- authoritative identification of crop pests and pathogens, and parasitic helminths
- survey and diagnosis of plant health problems
- support for integrated pest management and biological control
- biosystematic research on arthropods, micro-organisms, nematodes and helminths
- diagnosis of biodeterioration problems for industry
- research on human mycoses and tropical parasitic diseases
- training, consultancy and advice in all these areas

CABI also provides the Technical Secretariat of the Consultative Group for BioNET INTERNATIONAL, an international cooperative endeavour dedicated to the development of effective biosystematic capabilities and services in developing countries.

OBC-01

© 1995 CAB INTERNATIONAL. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, electronic, by photocopying, recording or otherwise, without the prior written permission of CAB INTERNATIONAL